

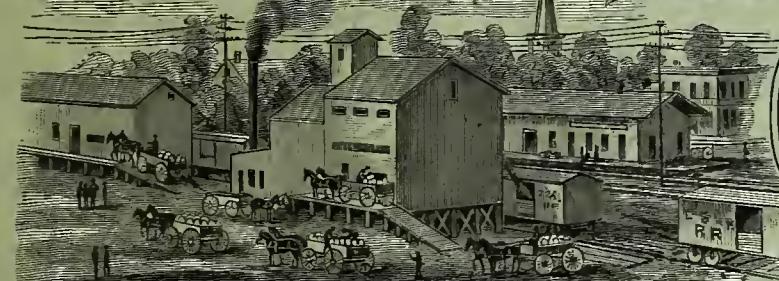
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THE AMERICAN

ELEVATOR AND GRAIN TRADE.



D. H. JOHNSON, DES.



Entered as second-class matter June 26, 1885 at the Post Office at Chicago, Illinois, under Act of March 3rd., 1879.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXVII. CHICAGO, ILLINOIS, DECEMBER 15, 1908.

No. 6. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

WE MANUFACTURE MACHINERY ... for ...

Elevating and Conveying Grain, including all
of the Standard Appliances for this purpose.

We do not manufacture shellers, clippers, cleaners or special machines
for treating grain, but confine our efforts strictly to machinery for
HANDLING GRAIN.

Let us figure with you.

STEPHENS-ADAMSON MFG. CO.

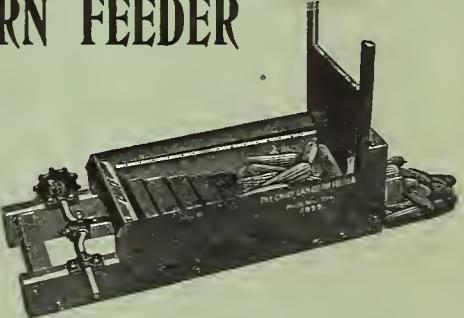
Manufacturers of Conveying and
Transmission Machinery

MAIN OFFICE AND WORKS, AURORA, ILL.

NEW YORK OFFICE—43 Exchange Place CHICAGO OFFICE—First National Bank Bldg.

THE CHIEF EAR CORN FEEDER

Will feed ear corn to a sheller, elevator
or drag belt, and will also feed small
grain. Occupies less space than any
similar device. *The feed is positive
and the feeder is strong and durable.* Write for prices and terms.



THE NATIONAL FOLDING MACHINE CO., Sidney, Ohio

H. W. Caldwell & Son Co., Chicago Agents

The P. H. Pelkey Construction Co., Wichita, Kan., Western Agents



WE MANUFACTURE SALEM BUCKETS

There are more of them in use than all other Steel Buckets combined. They fill
more readily, carry maximum load, and discharge more perfectly than any other bucket.

We carry ready for immediate shipment a large stock of all sizes and gauges.

We also manufacture complete grain elevator equipments. Send us your speci-
fications. Catalogue for the asking.

SKILLIN & RICHARDS MFG. CO., CHICAGO, ILL.

Y MEANS You
O MEANS Orders
U MEANS Us
N MEANS Now
G MEANS Grain

This is the connection.

The whole means

YOUNG & CO.

who want your
business

Royal Insurance Bldg.
CHICAGO

FOOS GAS ENGINES ARE DURABLE

WEIGHT AND LARGE BEARING SURFACES
are put into the wearing parts—large
crank-shafts, long phosphor bronze main
bearings and all bearings easily adjustable.

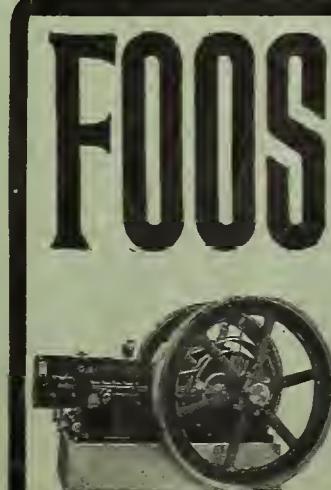
IGNITER POSITIVELY DRIVEN—

wipe spark. No snap, no hammer, no
coil springs about the ignitor.

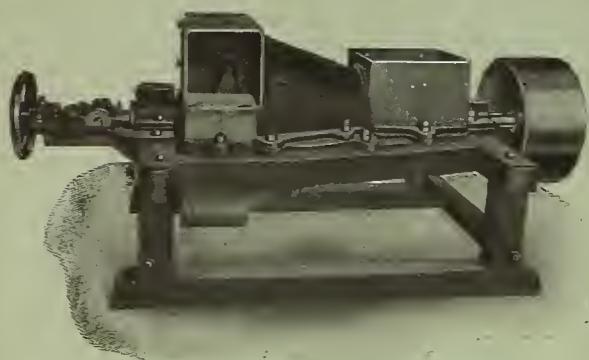
VALVES ARE VERTICAL—

no side wear and never out of adjustment.
Every bearing oiled while engine is in operation.
The FOOS has many exclusive features of
superiority.

Catalogue No. 39 tells the rest of the story.
THE FOOS GAS ENGINE CO., Springfield, Ohio.



**The Ohio Fan Discharge
Corn Sheller**

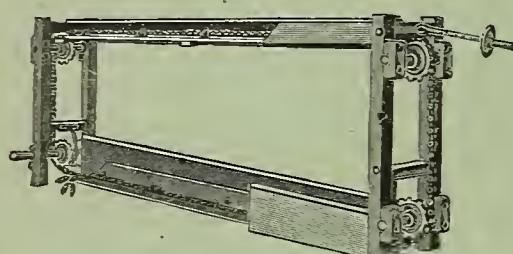


Patents Pending Adjustable Cylinder

WRITE FOR CIRCULAR OF OUR
**OHIO GYRATING
GRAIN CLEANER**

EQUAL TO ANY CLEANER MADE

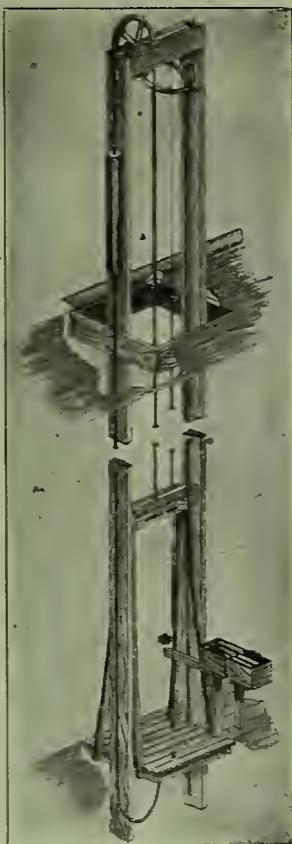
Chain Drag Feeders



Made Complete, Any Length, "Cast Iron" Bottom

Easy
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Install

Requires
Little
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Safety
Man
Lifts
With
Automatic
Locking
Device

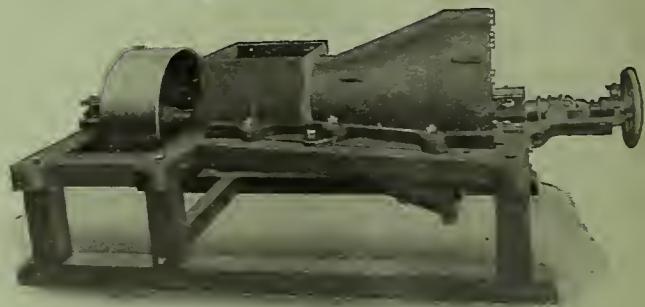
**Cast Iron Elevator
Boots**



With or Without Tightener

When building or repairing get our prices on any machinery or supplies.

Ohio Regular Corn Sheller

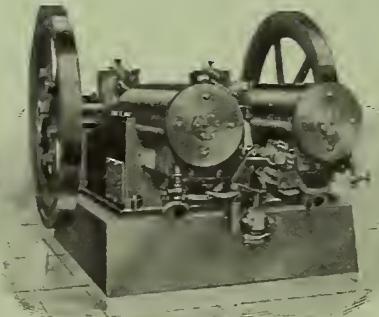


Both Style Shellers, 300 to 1,500 bu. per hour

COLUMBUS

**Complete
Producer
Gas Power
Plants**

Single and Double
Cylinders
15 to 200 H. P.
1 H. P. 1 Hour
1 lb. Coal



Twin Cylinders, 85 to 250 H. P.
Single Cylinders, 3 to 90 H. P.

For Simplicity,
Economy
and Reliability
The
COLUMBUS
is Exceeded
by None

Columbus Machine Co.,

Columbus, Ohio, U. S. A.

Send for Cat. No. 88

ELEVATOR MACHINERY AND SUPPLIES

FLOUR AND FEED MILL MACHINERY

STEAM AND GAS ENGINES

Pulleys, Shafting, General Power Transmission Machinery, Roll Grinding and Corrugating

LARGEST FACTORY AND STOCK IN WESTERN COUNTRY

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GREAT WESTERN MFG. CO.

Warehouse and Salesrooms
1221-1223 Union Ave.
KANSAS CITY, MO.

General Office and Factory
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NEW MARSEILLES DUSTLESS CYLINDER CORN SHELLERS

WE MAKE Hand and
Power Corn Shellers, Horse
Powers, Feed Grinders,
Portable Elevators and
Wagon Dumps, Pump-
Jacks, Grain Elevator Ma-
chinery and Supplies.

Made in Several
Sizes.
Both Stationary and Port-
able Styles.



MARSEILLES MANUFACTURING COMPANY, Marseilles, Ill.

POSITIVELY GUARANTEED to shell either shucked or unshucked corn faster, with less power in proportion to capacity; take the corn off the cobs cleaner; clean both cobs and corn more perfectly; do less crushing or grinding of corn or cobs and save a larger per cent of the corn than any other cylinder sheller on the market. *Send for Catalogue.*

SPEAKS FOR ITSELF

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Branch Houses and General Agencies at Principal Distributing Cities

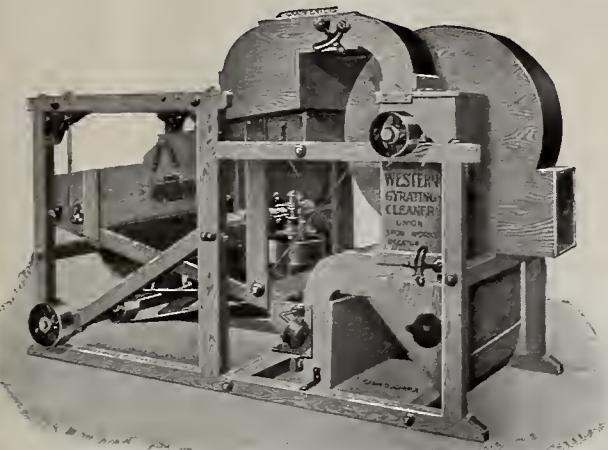
**BURRELL
Improved
Manlift**

This lift is so well
known it is useless
to describe it.

**Full
Elevator Equipments**

BURRELL MFG. CO.
249 South Jefferson St., Chicago

WESTERN SHELLERS AND CLEANERS



Best
on
Earth



THE WESTERN GYRATING CLEANER

Made in seven sizes. Capacities from 200 to 1,800 bushels per hour.

Rotary motion.
Perfect balance.
No shake.
Perfect cleaning.
Cleans all kinds of grain.
Noiseless, strong, compact and durable.

THE WESTERN PITLESS SHELLER

Made in three sizes. Capacities 300 to 1,300 bushels per hour.

Will not crack the corn.
Does not require a pit or tank under your elevator.
Discharges directly into the boot.
Fan chamber is adjustable; can be changed to discharge either to right or left, under or over.

Fitted with our patent adjusting lever, enabling the operator to adjust cylinder while running to all kinds and conditions of corn.

A complete line of Elevator Equipment—Plans and Specifications furnished.

UNION IRON WORKS, - - - DECATUR, ILL.

Complete stock of Shellers and Cleaners carried at

1217-1219 Union Avenue, KANSAS CITY, MO.



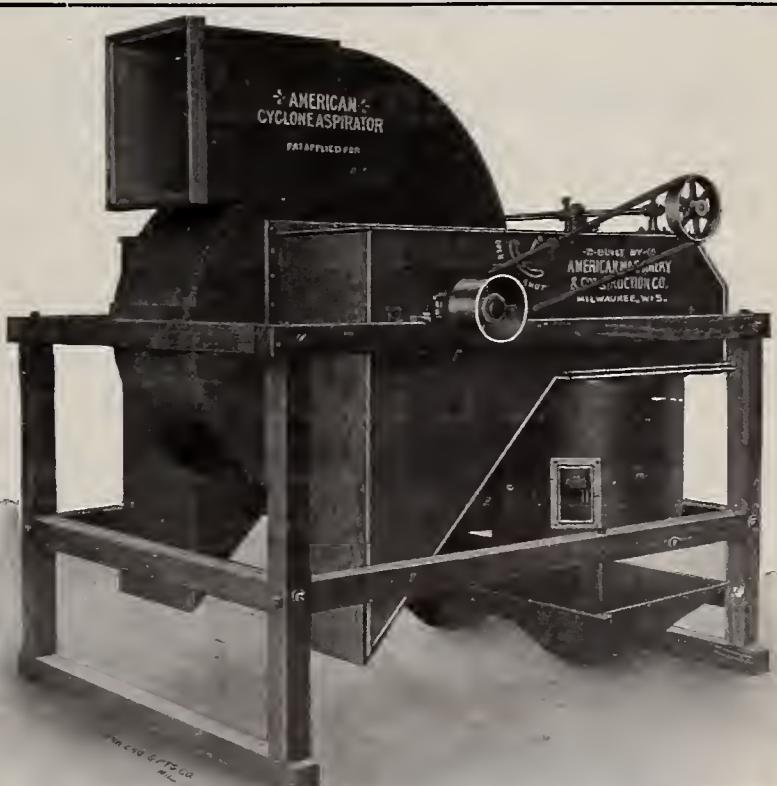
The AMERICAN GRAIN CLEANER

has the following exclusive features:

The only perfect system of Pneumatic Cleaning.
The Double Compensating Shakers, which have an exceptionally large screening surface.
The Combination Fan and Shaker Shaft, which cuts the amount of power and attention required to less than half of that necessary for other machines.
Other points of superiority are fully described in our descriptive circular.

These machines can be had in either All Steel or in Combination Wood and Steel Construction.

Descriptive matter sent on request.



The AMERICAN CYCLONE ASPIRATOR

does Pneumatic Cleaning only and is used to separate from grain all impurities which are lighter than the material to be cleaned.

For separating sprouts, chaff and dust from the malt as it comes from the kilns, this machine has no equal.

In mills it will prove itself the best machine for taking all the chaff, dust, etc., out of the grain.

AMERICAN MACHINERY & CONSTRUCTION COMPANY. 103 W. WATER STREET
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Announcement For The New Year

Notwithstanding the popularity of the McLeod Automatic Grain Scale in the past, we shall present our scale for 1909 with a number of new, distinct features.

In its new form the McLeod Scale will be the most accurate and up-to-date scale on the market.

Full announcement of the new scale will be made in January, 1909.

WRITE TO-DAY FOR PARTICULARS

McLeod Bros.
Bloomington - - Ill.

Avery Automatic Scales

are

Accurate and Reliable

Don't take our word for it. Ask your friends, and then

Prove It at Our Risk

NORRIS & ANDERSON.

Maize, Kansas, Aug. 18, 1908.

The Avery Scale Company,
North Milwaukee, Wis.
Dear Sirs:-

Enclosed please find check for scale. We are perfectly satisfied with the scale. We are not afraid to make affidavit weights on a car of grain weighed over the Avery Scale and have had no trouble at all.

We are glad we cancelled the order for the other and took the best.

Yours truly,
Norris & Anderson.

GLASGOW MILLING COMPANY.

Glasgow, Mo., Nov. 5, 1908.

The Avery Scale Company,
North Milwaukee, Wis.

Gentlemen:-

We inclose you check in payment of the last scale bought of you.

We have all three scales working and find them all you claim for them, and we take pleasure in recommending the Avery Scale.

Yours truly,
Glasgow Milling Co.

(Signed) C. H. Barnes, Sec'y.

*Write to-day for
catalog M.*

AVERY
Scale Co.

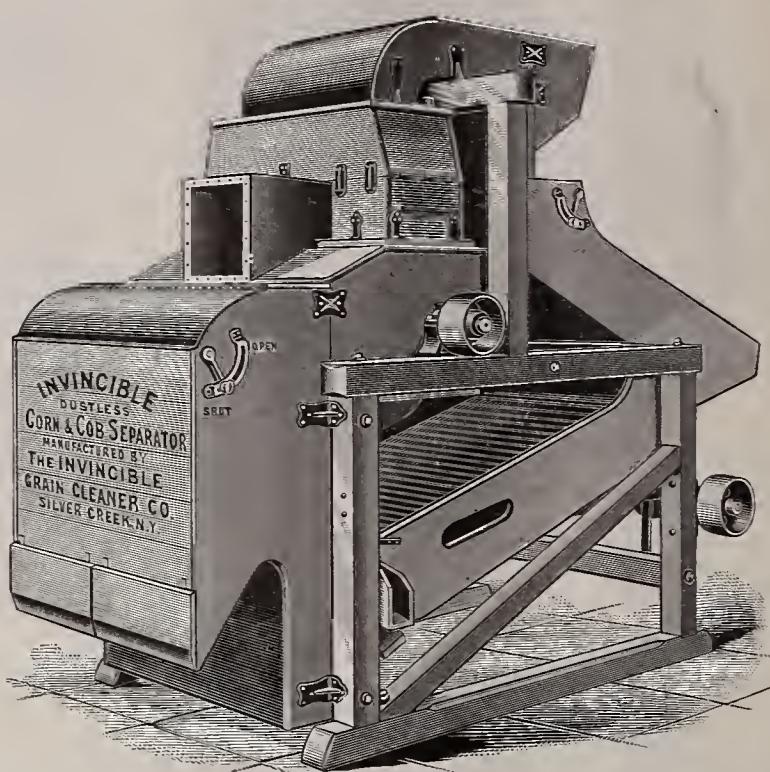
North Milwaukee,
Wis.



CLEAN YOUR CORN

This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

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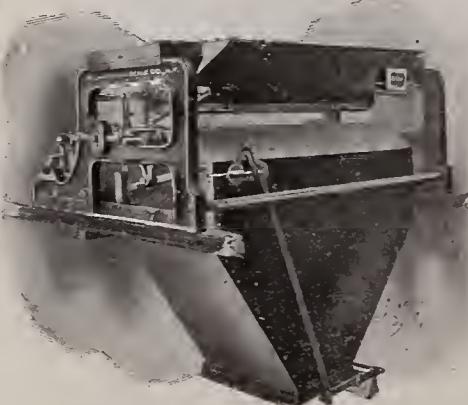
Portland Iron Works, Portland, Ore.

A Happy Christmas to You All

WE ARE HAPPY because we have through the medium of our Scale saved our many customers their profit on hundreds of thousands of bushels of grain during the past year.

WE HAVE MADE GOOD our claims to our customers and our customers have made good their claims against railroads, because

The Richardson Automatic Grain Elevator Scale



WEIGHS with absolute accuracy
all the grain spouted to cars.

MECHANICALLY REGISTERS
all the grain so delivered.

DOES NOT SKIP OR STOP
through sticks, cobs or straws
in the grain.

AND IS THOROUGHLY RE-
LIABLE.

We are ready to make good in
hundreds of other elevators dur-
ing the coming year.

RICHARDSON SCALE CO.

3 Park Row, New York

122 Monroe St., Chicago

415 Third St., S., Minneapolis

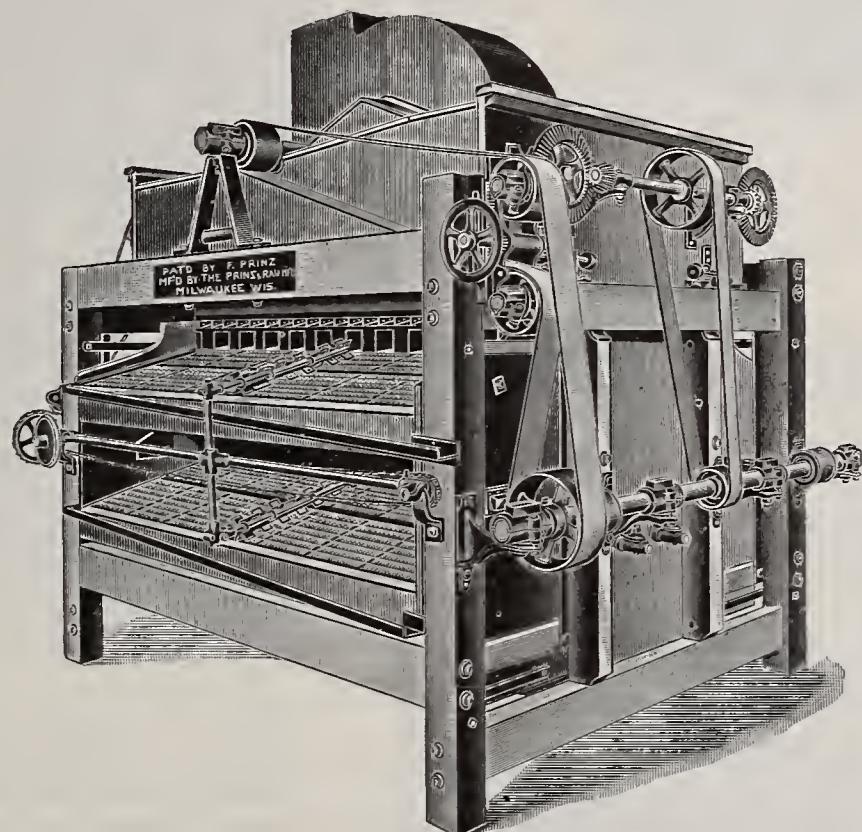
The New Bill of Lading

will make claims for shortages difficult to collect in full. You can prevent the leakages in transit by using the Kennedy Car Liner in the old cars that you load. Made by

FRED. W. KENNEDY, **Shelbyville, Ind.**

PRINZ AUTOMATIC SEPARATORS

Recommend themselves to those who want the most perfect grain cleaners



They were the first and only separators with **PERFECT AUTOMATIC TRAVELING SIEVE CLEANERS**, insuring absolutely clean sieves at all times.

They have **SHEET STEEL SCREENS**, with seed screen at the head of each sieve. Screens retain their shape under the hardest kind of usage.

A **PERFECT AUTOMATIC FEEDER** spreads the grain the entire width of sieve, and a large slow-running fan creates a **STRONG, STEADY SUCTION**.

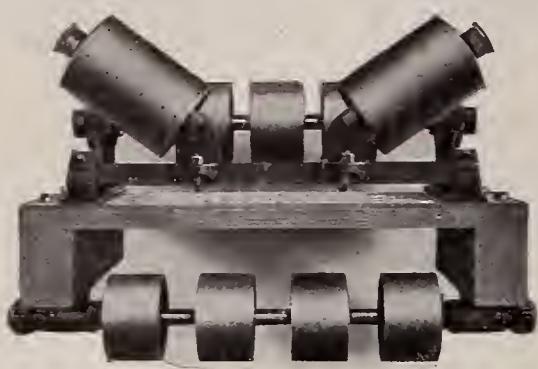
The most compact separators built, occupying the minimum floor space per bushel capacity.

Write for Descriptive Circulars

THE PRINZ & RAU MFG. CO.
Milwaukee, Wis.

REPRESENTED BY W. G. Clark, 415A La Salle Ave., Chicago, Ill.; A. H. Kirk, 1-A Chamber of Commerce, Minneapolis, Minn.; G. M. Miles, 1057 Pierce Bldg., St. Louis, Mo.; F. E. Lehman, 124 Board of Trade, Kansas City, Mo.; C. H. Near, 770 Ellicott Square, Buffalo, N. Y.; M. D. Beardslee, 106 Piquette Ave., Detroit, Mich.

EUROPEAN REPRESENTATIVES. Ingenieur Bureau, Prins Mauritsplein La, The Hague, Holland.



Improved Belt Conveyor

Carries all kinds of grain and mill products in package or bulk. Gradual, uniform curve of belt secured without complicated parts. Bearings thoroughly lubricated and have adjustment for taking up wear. Tripper substantial and reliable. Entire system economical and satisfactory—nothing to get out of order.

We manufacture a complete line of Elevating, Conveying and Power-Transmitting Machinery. Headquarters for supplies.

H. W. Caldwell & Son Co.
Chicago, Western Ave., 17th-18th Sts.

NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church Street

Elwood's Grain Tables

Show the value of any number of bushels or pounds of **WHEAT, RYE, OATS, CORN OR BARLEY** at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

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MITCHELL BROS. CO., 315 Dearborn St., Chicago, Ill.

CONSTANT MACHINERY IS WHAT YOU WANT

THE SAFETY MAN-LIFT

has roller bearings, which makes it easily operated. The improved brakes and safety catch prevent accidents. The adjustable counterweights and springs make it all that could be desired. Buy ours; it pays.

THE B. S. C. CHAIN FEEDER and DRAG

for feeding elevator boots and shellers, any capacity, any distance, automatically. Handles all kinds of grain without waste or mixing.

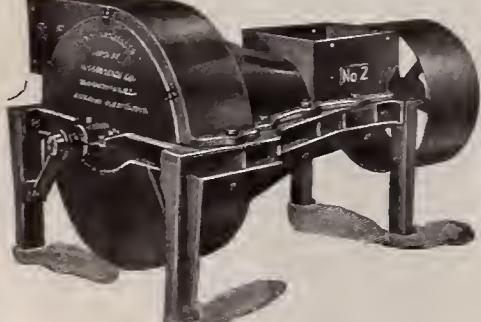
The ONLY WAY to feed a sheller.

THE U. S. CORN SHELLER

Patented Oct. 17, '05.

No pit or lower hopper. Cheapest installed. Quickest repaired. Our new Screw Adjustment can be used while sheller is full of corn and running. Shells clean, saves cobs. TRY IT.

Write for our catalog or you may miss something good



B. S. CONSTANT CO., Bloomington, Ill.

The Grain Dealers' Supply Co.

322 Fourth Ave. South, Minneapolis, Minn., having bought the complete stock of C. D. Holbrook & Co., are now located in the old Holbrook location at 305 South Third Street, where they will continue the business of furnishing the grain trade with

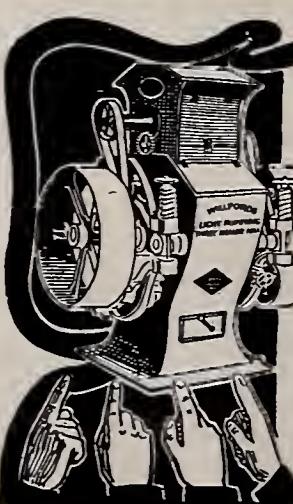
Elevator and Mill Machinery, also Avery Automatic Scales and Charter Gasoline Engines.

WE SOLICIT YOUR ORDERS.

305 South Third St., Minneapolis, Minn.

4 GOOD POINTERS

ON THE Willford Three-Roller Feed Mill.



(1) It is Easy to Handle.

(2) It is Strong and Durable, but Simple.

(3) It will Grind the Most Feed with the Least Power.

(4) It can Always be Relied Upon.

Write for Circulars and Prices.

WILLFORD MANUFACTURING CO.,
303 3d St. South, • MINNEAPOLIS, MINN.

Address
Dept. 7

ROCKFORD ENGINE WORKS
Rockford, Ill., U.S.A.

The Engine that
will please you

ROCKFORD

From 3 to 30 H.P.,
any style.
Write for spe-
cial price.

NEAT—NOBBY—HANDY

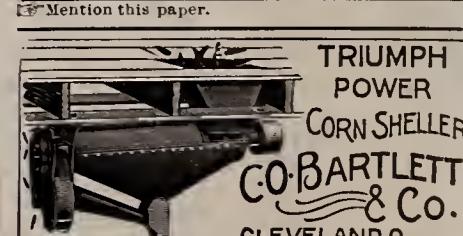
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"PERFECTION" SEED SCOURER AND CLEANER

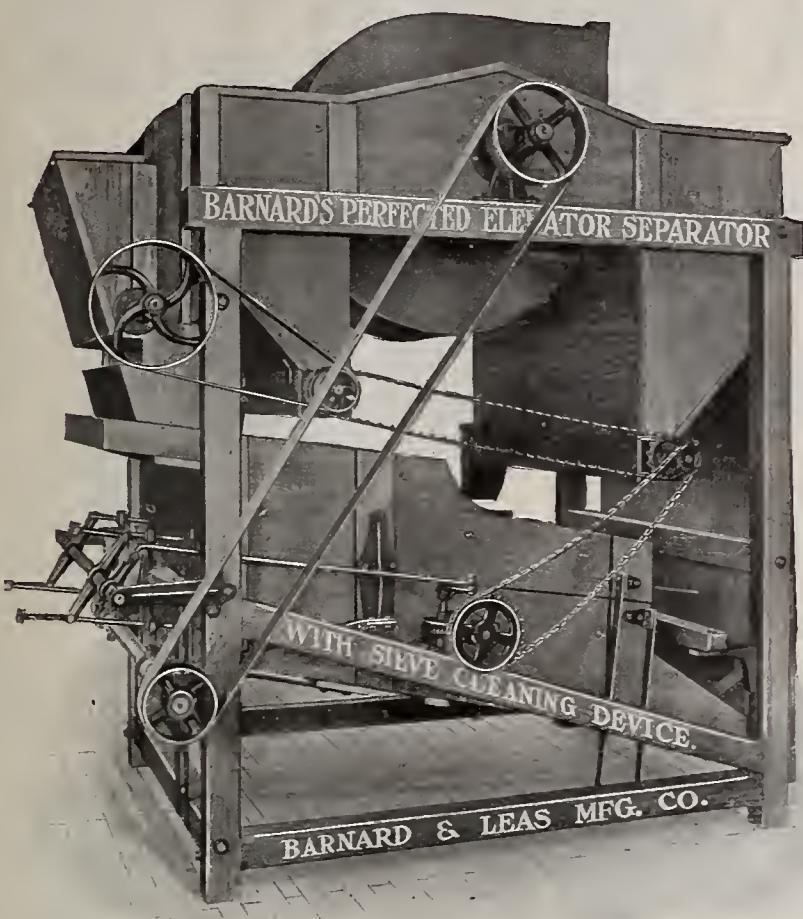
A Money Maker
Something New

Sidney Elevator &
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Sidney, - Ohio



TRIUMPH
POWER
CORN SHELLER
C. B. BARTLETT
& Co.
CLEVELAND O.

Barnard Perfected Elevator Separator



BARNARD'S PERFECTED WAREHOUSE AND ELEVATOR SEPARATOR
With Sieve Cleaning Device

Makes the most efficient sieve and air separations of any machine on the market. They are under the full control of the operator at all times.

The sieve cleaning device works under the sieves. Thus it lifts the trash out of the holes and causes it to fall over instead of assisting it to pass through with the grain. This results in keeping the sieves perfectly clean at all times and insuring positive and uniform work.

We also make the Cornwall Corn Cleaner, the Victor Corn Sheller, Willford's Light Running Three-Roller Feed Mill, Barnard's Two and Three Pair High Feed Mills and a complete line of Flour Mill and Elevator machines and supplies.

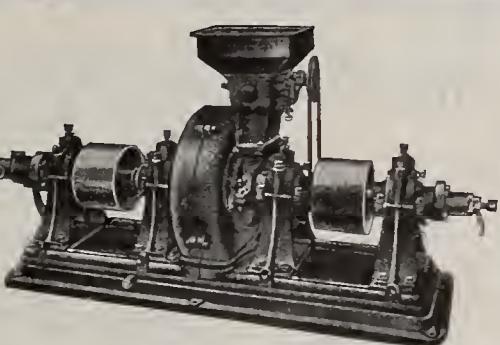
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Builders of Elevator Machinery and Supplies

MOLINE, ILLINOIS

A
Money-Making
Proposition



Monarch Attrition Mills

Enable the elevator owner to secure a share of the profitable feed grinding business of his territory. This is a legitimate side-line for elevators, and there is money in it if done the Monarch way. You can grind any feed material with a Monarch Mill and make a product that will please your customers and bring them back for more. We make the Monarch in a number of sizes and have just the mill for your power.

SEND FOR OUR NEW CATALOGUE

and learn all about the scientific grinding of feed. It treats the subject from a new standpoint and also tells why the Monarch has phosphor-bronze interchangeable bearings; cable-chain oilers; double movable base; safety spring; quick release; relief spring; special adjustable endless belt drives; hammered steel shafting; ball bearings and other improvements not found in competing mills.

Mention amount and kind of power you expect to use for operating a mill

SPROUT, WALDRON & CO.

John Williams Taylor, Southwestern Agent,
491 Pacific Ave., DALLAS, TEXAS
Northwestern Branch, 301 Corn Exchange Bldg.,
MINNEAPOLIS, MINN., C. H. Mohr, Mgr.

Box 320, Muncy, Pa.



The "Eureka" Corn and Wheat Dryer and Cooler

Dries the grain uniformly and extracts any percentage of moisture desired.

Most economical, dries continuously, inexpensive to adopt.

Cools hot grain.

Built in capacities of five bushels to any quantity.

Satisfactory Results Guaranteed

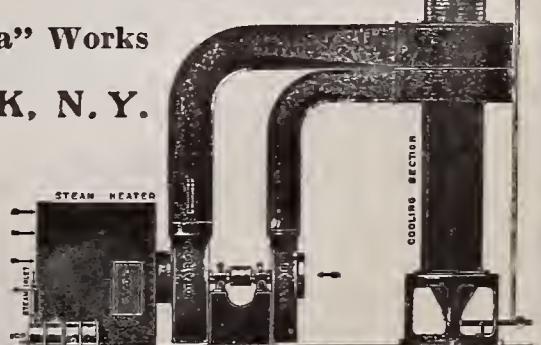
The S. Howes Company

"Eureka" Works

SILVER CREEK, N. Y.

"Eureka"

Grain Cleaners
Oat Clippers
Feed Packers



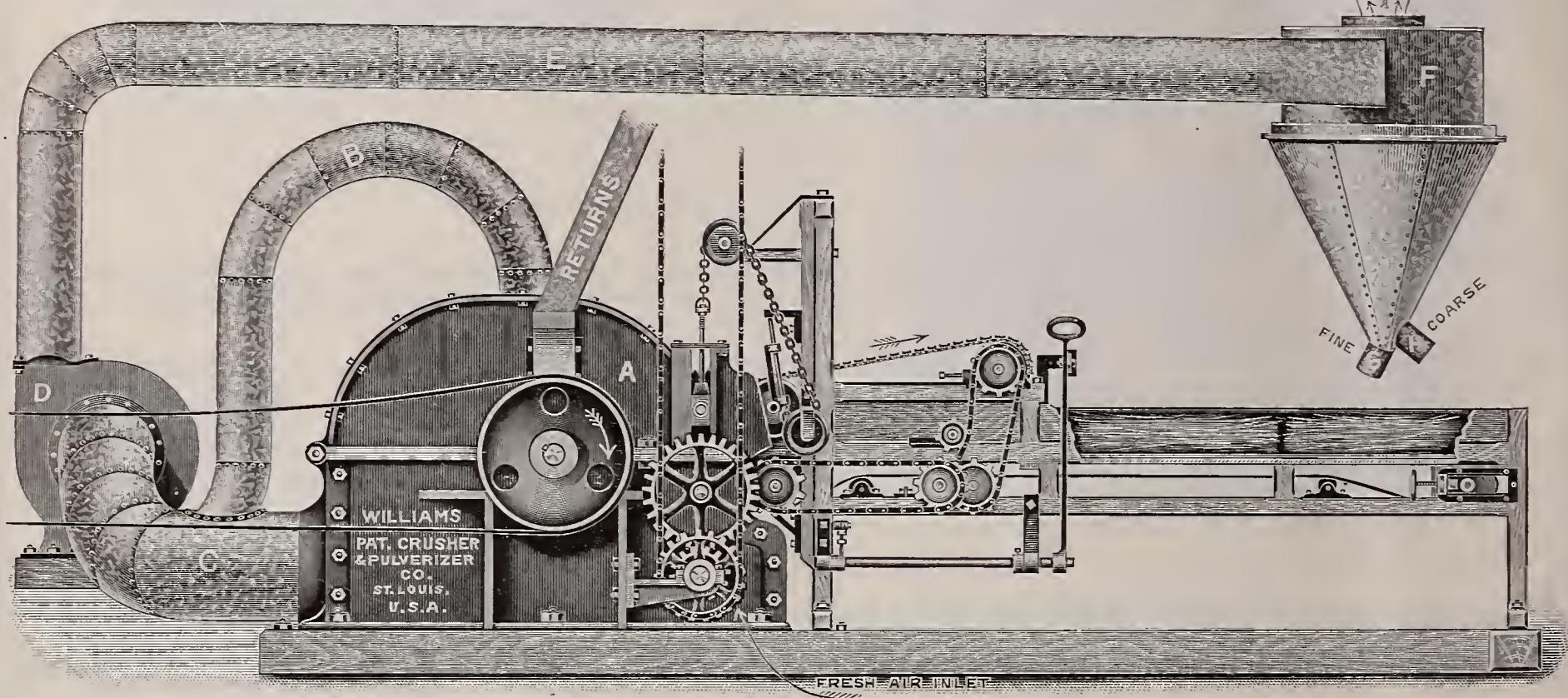
Represented by

W. E. SHERER, 309 S. Third St., Minneapolis, Minn.
J. N. BACON, Spencer House . . . Indianapolis, Ind.
GEORGE J. NOTH . . . 1329-1330 Monadnock Block, Chicago, Ill.



WILLIAMS PATENT COMBINED HAY AND STRAW CUTTER SHREDDER and GRINDER

Made in 6 Sizes



THE ONLY VERSATILE FEED GRINDER EVER PRODUCED

They will reduce EAR CORN with the HUSK on.

They will reduce ALFALFA HAY from the BALE or from the STACKS.

They will reduce ALFALFA HAY and EAR CORN together.

They will reduce ALFALFA HAY and SHELLLED CORN together

They will reduce ALFALFA HAY and OATS together.

They will reduce ALFALFA HAY and FODDER OF ALL KINDS, with the CORN on.

They will reduce ALFALFA HAY and PEA VINES.

They will reduce EAR CORN ALONE or SHELLLED CORN ALONE.

They will reduce OATS ALONE.

They will reduce ALFALFA HAY and two other kinds of CEREALS at the same time, as each machine has three separate feeding places.

We have a corps of competent milling engineers in the field making estimates and taking contracts for the installation of complete alfalfa meal plants, from the stump up.

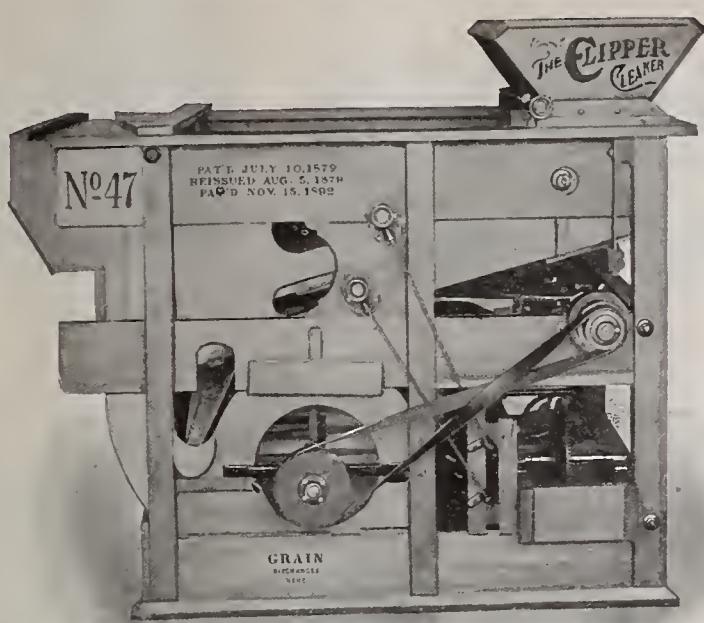
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Write for BULLETIN NO. 7*

Oklahoma Representative: Chas. A. Tappan, 217 W. Reno St., P. B. 1268C, Oklahoma City, Okla.
Seattle, Wash., 456 Empire Bldg.

*Write for Catalog of the Noxon
Automatic Hay, Meal and All Around Feeder.*

Los Angeles, Cal., 1531 Maines Ave.

THE WILLIAMS PATENT CRUSHER & PULVERIZER COMPANY
ST. LOUIS, MO., U. S. A.

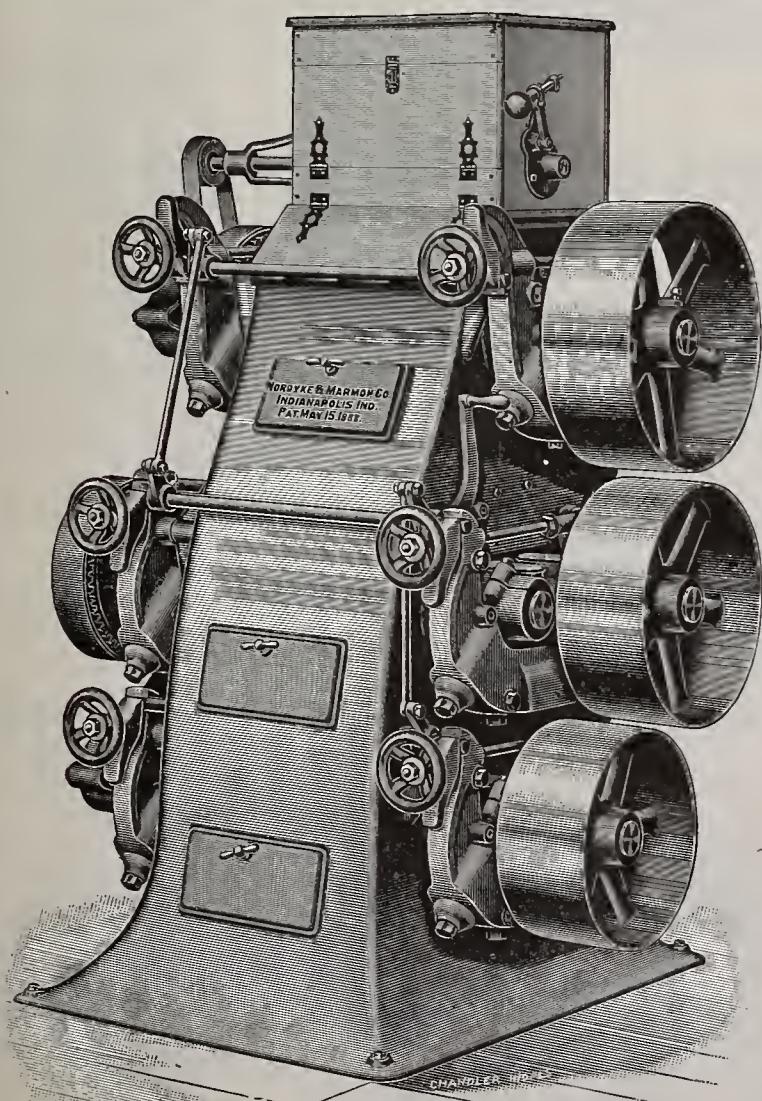


The No. 47 Clipper Cleaner

is unequaled for handling seeds or grain in local elevators. This machine has Traveling Brushes on the screens, which enables you to keep it working to its full screen capacity all the time. It is very light running, strongly built, easily installed and simple in operation. We guarantee this Cleaner to give perfect satisfaction on clover seed, timothy or any kind of grain, and it can be operated with

one-fourth the expense for power of any suction cleaner on the market. It will not require over one-half of one horsepower on clover or any kind of seed, nor over one horsepower on grain. If you are looking for a first-class, up-to-date cleaner of moderate capacity, we would be glad to send you catalog and give prices and particulars upon request.

A. T. FERRELL & CO., Saginaw, W.S., Mich.



The N. & M. Co.

THREE-PAIR-HIGH SIX-ROLLER MILL

The most substantial, most economical in cost of maintenance. Has great capacity and requires comparatively small power. The only Six-Roller Mill with drive belts properly arranged to place the belt strain on bottom of bearings, where it belongs. It is not the cheapest mill in first cost, but it is by long odds the cheapest in the long run. It is without question the best roller feed mill on the market. Feed grinding pays best when you have a mill which will do perfectly any kind of grinding required and stand up under hard work without breakages and delays.

Send for Catalogue

ELEVATOR SUPPLIES

We carry a complete stock of Heads and Boots, Elevator Buckets and other Elevator Supplies. All orders are given the very best of attention.

Nordyke & Marmon Company

America's Leading Flour Mill Builders

Established 1851

INDIANAPOLIS, IND.



WELL KNOWN THE WORLD OVER

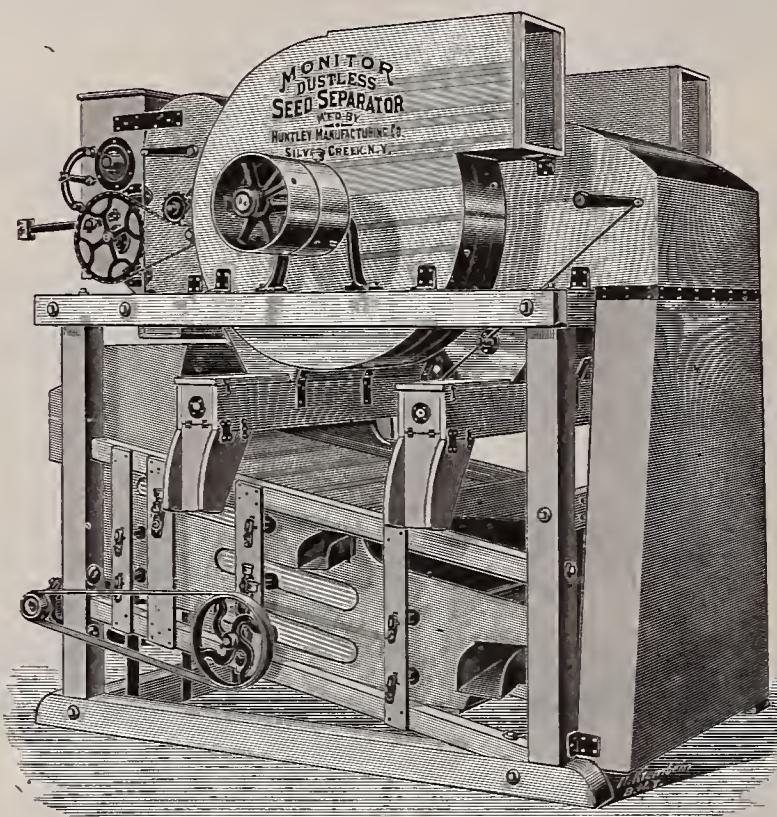
MONITOR GRAIN AND SEED CLEANERS



We are the world's largest manufacturers of grain and seed cleaning and grading machinery

Screen Separations

Five repeated screen operations, insuring perfect sieve cleaning ability for any class of seed or grain cleaning and providing for every requirement when used as a grader, recleaner or sweepings and tailings reclaimer. Sieves are provided with our perfected *under the screen* automatic traveling brushes.



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Our "Monitor" style of air expansion chamber and air equalizing regulator (our patent) in principle and operation differ widely from anything used for grain and seed cleaning purposes. Monitor Air Separations are acknowledged to be superior to anything used in cleaning machinery manufacture. Ask any prominent seed or grain cleaning expert.

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The Monitor seed cleaner enjoys the distinction of being *the standard* seed cleaner. It is used and endorsed by the largest and most successful seed cleaning concerns in the world. While other machines are frequently used for the first cleaning, investigation will prove that the Monitor is invariably used for recleaning after other cleaners, and for the final thorough cleaning and grading.

To the elevator operator looking for a machine that will successfully handle every class of seed or grains, either for first cleaning, recleaning or grading, the Monitor offers many advantageous features that do not exist in any cleaning machine manufactured in the United States.



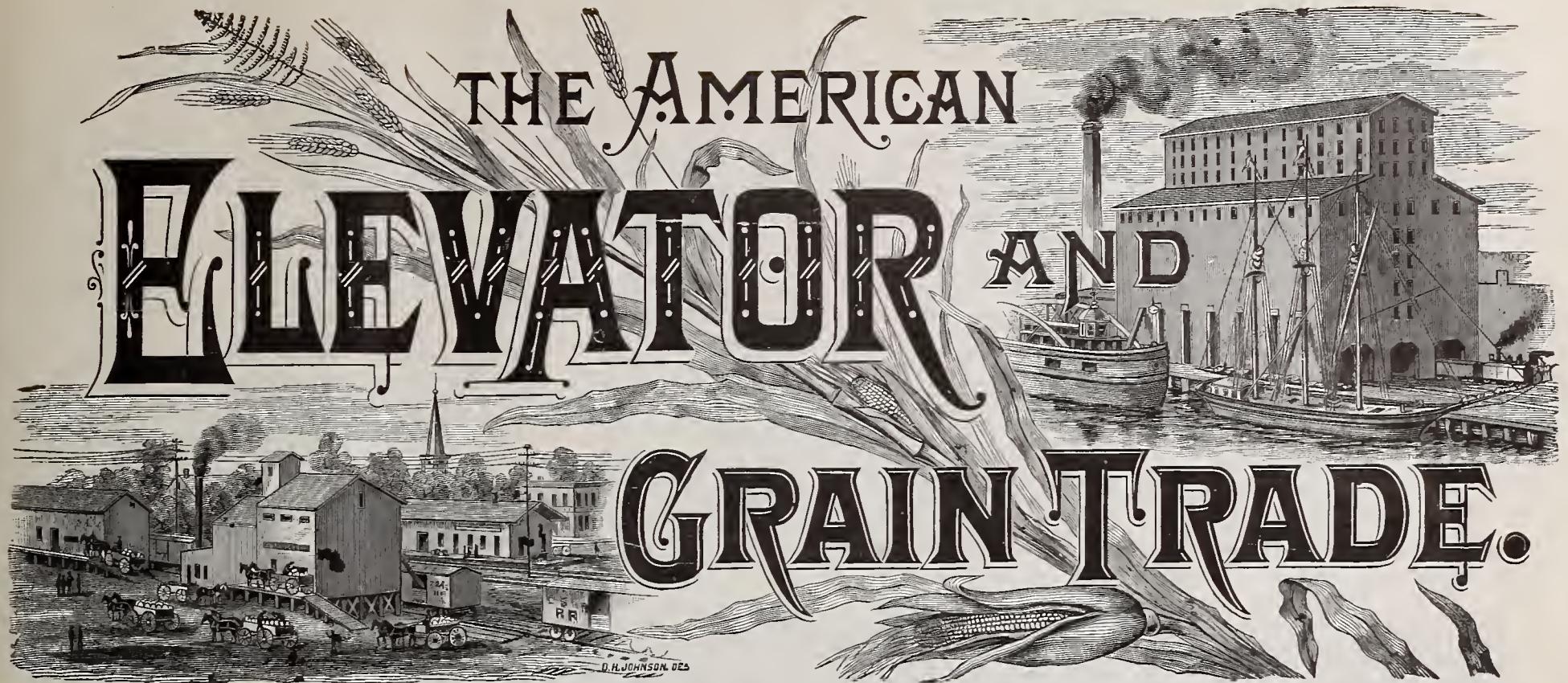
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AGENTS

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Chicago, Ill., F. M. Smith, 302 Traders Building
St. Louis, Mo., S. J. McTiernan, Terminal Hotel
Kansas City, Mo., H. C. Draver, 10 Board
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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

Vol. XXVII.

CHICAGO, ILLINOIS, DECEMBER 15, 1908.

No. 6. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

**NEW NORTHERN CENTRAL RAILWAY
ELEVATOR AT BALTIMORE.**

With the completion of the new Northern Central Railway Elevator at Canton, Baltimore, Md., on November 1 the city of Baltimore has acquired ample facilities for taking care of the increased grain receipts moving at that port.

The elevator is an addition to Elevator 3, and its thirty-two reinforced concrete tanks, so well shown in the illustration, have a total capacity of 1,000,000 bushels. On the top of the tanks

is a structural steel-frame cupola, inclosed with vitrified tile walls.

The dimensions of the elevator are 100x200 feet and over that surface 65 and 75 foot piles were driven. The area was then inclosed with sheet piling, after which it was filled in with sand and gravel, even with the top of the piles, which were cut off at low water. On the top of the sand and gravel was laid a concrete reinforced slab 3 feet 6 inches thick, on which the foundation walls forming the basement rest.

The basement walls are 9 feet high, with nu-

merous openings to admit light and ventilation. On top of these walls is another reinforced concrete slab which forms the bottom of the tanks. The tank walls are 8 inches thick and 90 feet high and are composed of washed gravel and sand taken from Chesapeake Bay.

The grain is received and weighed in the old elevator and transferred to the new elevator through a fireproof gallery on two 36-inch conveyor belts, as shown in the illustration. Grain can be taken on these belts to and from the old elevator at the rate of 30,000 bushels per hour



NEW NORTHERN CENTRAL RAILWAY ELEVATOR AT BALTIMORE.
James Stewart & Co., Chicago, Engineers.

for each belt. Grain is drawn from the bottom of the tanks by belt conveyor in the same manner and equal capacity.

An addition was built to the boiler house also, and a 250-horsepower boiler was installed. The old smokestack was torn down and a new radial brick stack, 175 feet high, with 6-foot 6-inch diameter flue, was built in its place.

The elevator was built by the Grain Elevator Department of James Stewart & Co., Chicago, of which W. R. Sinks is manager and R. H. Folwell engineer.

OHIO CORN DINNER.

The Ohio Corn Show, held at Columbus, closed on November 25 with a corn banquet. It was given under the direction of the Ohio Corn Improvement Association, and was a novel function. "Hog and Hominy" were the basis of the menu, which was elaborate enough to satisfy the most exacting epicure, although it is likely some of the

MARKETING CORN.*

BY S. W. STRONG,
Secretary Illinois Grain Dealers' Association.

Marketing corn is so familiar an occurrence that it would hardly seem of sufficient interest or importance to warrant the attention of an audience or the time necessary to study the various conditions and phases through which corn passes to the market. Everybody knows all about it, and nearly everybody, especially farmers, has had experience many, many times for many, many years, and so common a transaction must certainly needs be magnetized or electroplated to make it of sufficient interest to hold the attention of an intelligent audience of American people who are visitors at a corn exposition.

Everyone knows that the farmer takes a load of corn to the elevator in the town and sells it, and that is marketing corn in the common acceptance of the term. True, that is the first step of the transaction of passing the grain on to the con-

vator it is transported by rail to the terminal market, or gateway of that part of the country which is served by a certain railroad, and here it is sold by the receiver, or commission firm for the elevator operators, to be again, perhaps, forwarded to an exporting or another distributing market, which supplies the exporters, the millers, manufacturers of corn products and the jobbers, who send the grain out of the country, grind it into meal or flour, or any of its many other forms of human food, or it is sold for feeding stock.

The farmer sells it personally to the country elevator operator, and he in turn may either sell it "his track" or he may consign it to a representative in the terminal market, where he may, if he chooses, follow the car of grain and see it sold by sample on the floor of the exchange, as very nearly all grain is sold by sample and on its real money value. Before the grain reaches the floor of the exchange it is inspected and weighed by officials who are especially designated, either by appointment from the Governor of the state, or by the board of trade, or by the chamber of commerce of the terminal market where such shipment is delivered.

What I desire to make plain to you is the fact that a shipper of a car of grain from the country can follow that car and see it inspected, see it weighed, and see it sold on the exchange, wherever that may be. He may be a witness of the entire transaction all the way through. The fact that the grain has been inspected does not in any way affect the value of the grain, as by far the larger part of it is sold by sample and for its real worth. The miller buys it for the amount of meal or flour it will make, and other trades in like manner.

From the terminal market on, all subsequent transactions are very similar. The exporter, the miller, the manufacturer and the jobber all buy by sample and on their judgment as to the amount of the product which they desire to make that will be produced from the grain. They buy either themselves or more often through brokers, or agents, but in every case the deal is the same and the grain is bought on its merits and for exactly what it is worth in itself and not for any grade given to it by an inspection official. The higher the quality of the grain the greater the value, and as a consequence the more in money is received for the grain all along the line of its various travels. If there has been carelessness in caring for the grain it has a lower value, and necessarily a smaller price. The quality of the grain is fixed by the producer only, for it is owing to his work and care altogether whether the grain is of first or second or lower grade.

Much too little heed is given to the way the corn crop is gathered into the cribs, and this is owing, to a large extent, to the practice throughout the country of the elevator owner paying one price for corn, whether it is good, bad or indifferent as to quality. One price for all and to all is too often the rule, and there is little inducement for a farmer to take extra good care of his crop and secure it into cribs without damage, when he knows that his grain will bring just the same price as corn kept in open cribs, rail pens or thrown on the ground, but when the corn passes from the farmer to the grain dealer, thereafter in every transaction, whether with the feeder or the corn expert who buys for the Corn Products Co., the value, the worth, the quality is what governs.

Uniform rules for grading all grains were adopted at the twelfth annual meeting of the Grain Dealers' National Association, held in the city of St. Louis in October, and it is expected that all the exchanges of the country will put them into force July 1, 1909. They are believed to be so simple that anyone who handles any amount of grain may understand them and be able to apply them to transactions in which grain



VIEW OF BELT GALLERY IN NORTHERN CENTRAL RAILWAY ELEVATOR, BALTIMORE, MD.

breeders of high-class corn did not always recognize all they had set before them as corn or a product of corn. There was "cream of corn" with corn flour wafers, and parched corn in the form of Krisp Korn Kernels. "Hogged corn and apples" was more familiar, but the browned sweet potatoes were "all by their lonesome" as strangers in this parade of corn, more or less disguised though the corn might be; for alongside of the "yams" were hulled corn and scalloped corn, and hoe cake and hot tamales, and so on to the end of the bill.

Governor Harris was the guest of honor, and A. P. Sandles of Ottawa, toastmaster. Addresses were made by Joseph E. Oring, Champaign County; O. E. Bradfute, Green County; W. J. Spillman, Washington; T. D. Harman, Pittsburg, editor National Stockman and Farmer; Governor Harris, whose subject was "The Boy With the Hoe;" Dr. H. M. Brown, president State Board of Agriculture; C. W. Burkett, New York, of the American Agriculturist, who offered a silver loving cup for the boy farmers of the state, and C. T. Williams of the Wooster Experiment Station.

The show itself and the meeting of the Association were both highly satisfactory to those directly interested.

Send us the grain news from your neighborhood.

sumer, but there is a much longer route, and a far more varied one, before very much of the grain finally reaches the place where it is really consumed, or changed from the original grain.

It seems to me that, to get a fairly good idea of the entire transaction, we should begin with the harvesting, or husking, of the crop. Here is where the farmer begins to prepare the grain for the market, and very much depends upon how he handles it as to the condition in which it is when it reaches the place where it is finally marketed; that is, where it ceases to be in its original form of corn and becomes one of the hundred and more forms of the products of corn, manufactured by the many processes of grinding, milling, etc. If the corn is gathered too soon it will deteriorate in the crib or elevator, or in the cars in transit, and become "no grade;" fit for use for only a few purposes, and is not very valuable, but if allowed to remain in the field until the grain is fully matured (and in a season like this year very nearly all of the corn is perfectly ripened) the marketing of the crop is very greatly simplified, and there are none of the serious losses consequent in years of poor or soft corn crops.

After the corn is delivered to the country ele-

*A paper read by the author at the Illinois Corn Exposition at Springfield, Ill., on Thursday, November 26, 1908.

of any kind is the subject. These rules should be in the office of every grain dealer, be he country elevator operator, receiver, exporter or manufacturer of corn products, and through these dealers the producers should become familiar with them, and grain should be bought on its merits or grade from the first hands to the consumer. In other words, the producer, who, it has been shown, is the one who primarily fixes the quality of the grain by the way it is harvested and cared for, should be paid for the grade of grain he delivers at his market. If he delivered a first quality the value of that grade should be paid for the grain to him. This would result in an education of the producers that good grain would receive the highest price, and the man who, through carelessness and inattention, allows his crop to become damaged should be held responsible and receive only what the grain is worth on its grade.

In relation to corn in particular, it is generally thought that it can be handled in almost any way and not be damaged, or that only the most primitive methods will do for corn, when, in fact, corn is a grain which deteriorates with very little exposure to the weather and should be well matured before husking, be thoroughly cleaned when gathered, cared for in well-constructed cribs, and at all times be kept from rain and snow and delivered in good, sound condition to secure the highest prices which are paid by those manufacturers who prepare goods for the people. Too little is known generally by the producer of corn and the grain man as to the ultimate uses to which the grain is put, and this, too, should be used as a matter of education by all those who have to do with corn and the raising and handling of it for the market.

The glucose and starch industries of the United States annually consume 40,000,000 bushels of corn, one-half of which is used for culinary, laundry and manufacturing purposes. For every barrel of cane syrup and sorghum there are sold five barrels of corn syrups. It is used by the confectioner, is made into jams, jellies, marmalades, edible starches, and is getting to be one of the general articles of household use. Smokeless powder, grape sugar, anhydrous sugar, flourine, dextrine, corn oil, distilled spirits and, I am advised, a total of 152 different products are manufactured from corn.

In addition, the entire plant is used in some form or other. From the stalk is manufactured fiber, varnish and pith, which is used for packing warships. The husks are used for making mattresses, the blades are granulated into food for poultry and stock, and from the cobs are made pipes and vinegar; so that the value of corn ultimately will be many times increased in the coming years and the marketing of corn will then include the selling of the plant from the tassel to the root.

[To the above we may add that the Agricultural Department has shown that common print and other grades of paper may be made from the corn plant at a price that will make "corn paper" a rival in the paper markets of "wood pulp" paper, now so rapidly increasing in price owing to the disappearance of the spruce timber, from which it is made.—ED.]

FARM LECTURE TRAIN.

The Southern Pacific Railway Co. has started its fall lecture trains through the Willamette Valley of Oregon, where dairy and horticulture have largely replaced wheat growing. The first train consisted of seven cars, Pullmans for the accommodation of railroad officials, Oregon Agricultural College professors and newspaper men who accompanied the train, and three baggage cars with exhibits that showed the farmer just what he was anxious to learn. A stock car was carried and fitted with model stalls for the accommodation of two prize dairy cows. An engine and air pump was installed in this car and a

milking machine operated. One cow was milked in this way at each stop. Thousands of farmers had thus their first introduction to this ingenious machine, although the train was operated through a big dairy section. In the horticultural division practical apple packing was carried on and the best ways of grafting, budding, pruning and caring for orchards were shown by experts.

The trip occupied eight days and a stop of two hours was made at each town on the road in the valley.

H. A. JUNEAU.

The weighing department of the Wisconsin Grain and Warehouse Commission has been doing very good work in the way of reporting in a systematic and concise manner the condition of cars on arrival, and has been rewarded with so much consideration for its recommendations that it has been able to report a material reduction in the percentage of cars arriving at Superior in bad condition. This condition of things is no doubt a source of satisfaction to the chief weigh-



H. A. JUNEAU.

master, H. A. Juneau, a young man who has been in charge only since June 1 last.

Mr. Juneau is an Illinois man by birth, his native town being Chebanse, where he was born on August 21, 1878. He obtained a good common school education in his native town, and after completing the high school course went to work on a farm, where he spent a year, gaining some experience that he now finds useful, of course.

Then, in 1896, he took to railroading via the telegraph office, spending twelve years in the operating and traffic departments of the Illinois Central in Illinois, and of the Northern Pacific and other lines in Wisconsin and Minnesota. During the four years ending with 1907 he represented the Great Northern at Superior as city passenger and ticket agent.

When the Wisconsin Grain and Warehouse Commission organized its weighing department and started its work on January 1, 1908, Mr. Juneau was made chief deputy weighmaster under E. P. Nelson, and when the latter resigned Mr. Juneau was on June 1 made chief deputy as a logical promotion for excellent service.

The grain trade of Liverpool was much disturbed on December 9, when the inspectors refused to allow No. 3 Manitoba wheat which had just arrived to grade as contract. Shorts were thrown into confusion and December advanced sharply. The cable did not specify the shortcoming of the wheat, but may have been on account of frosted kernels.

GRAIN STANDARDIZATION.

"Since the publication of my last annual report an unusual development has taken place in the work of grain standardization," says Hon. James Wilson, Secretary of Agriculture, in his report for 1908, dated November 27, 1908, and published on December 14. "The results already accomplished have been of value in bringing about a better understanding concerning the value of the various factors which are taken into consideration in determining the grade of any given lot of commercial grain, and have led to the formulation of more definite and satisfactory rules on grades in many of the markets.

Grain Standardization Laboratories.—Seven laboratories are now maintained outside of Washington, one at each of the following grain centers: Baltimore, Md., New Orleans, La., New York, N. Y., Duluth, Minn., Minneapolis, Minn., Chicago, Ill., and St. Louis, Mo. Numerous requests for the establishment of laboratories in other important grain markets have been received, but the limited funds available for this work rendered the opening of additional laboratories impossible; consequently the work has been limited to the primary markets, embodying the widest range of conditions and showing the greatest variation in the kinds and classes of grain handled. In each of the laboratories now in operation the work consists principally in determining the moisture content and in making mechanical analyses of samples of grain submitted by grain inspectors and merchants, and in carrying on such special investigations in co-operation with the research laboratory which is maintained in Washington as will furnish data of value in adjusting the unsatisfactory conditions now existing in the grain trade throughout the United States. The moisture test is most frequently called for, and large quantities of corn are now handled on a definite percentage statement of moisture content. A number of cases have been reported in which the results of the analyses furnished by the laboratories have determined the action taken in appeals and otherwise served in the satisfactory adjustment of grades.

Grain Transportation and Storage Investigations.—Within the past year some preliminary investigations were made on the changes which take place in grain while in storage and during shipment from country points to primary markets or to the seaboard. These investigations will be carried on more in detail during the coming year, giving special attention to the causes of the deterioration of corn during transit from the central part of the corn belt to the seaboard and thence to European ports.

Milling and Baking Value of Wheat.—Not having the proper milling facilities in the Bureau, arrangements have been made with the North Dakota Agricultural Experiment Station for co-operative investigations during the coming year whereby a limited number of commercial classes and grades of wheat can be properly tested as to their milling and baking value. Milling and baking tests are matters of fundamental importance in connection with the investigations of the Bureau, in that standards for wheat grades are dependent almost solely on the quality and quantity of bread which can be produced from the flour; and I respectfully call the attention of Congress to the need of sufficient funds for the installation and maintenance of a fully equipped and experimental flour mill.

Investigations at European Ports.—Of recent years many complaints have been received from European grain merchants concerning the badly damaged condition in which much American grain arrives at European ports. During the past year experts of the Bureau of Plant Industry have made a special study of the condition and quality of American-shipped grain at the time of its discharge at European ports. These investigations have shown that the reports of our consuls have been very conservative and that the complaints

of the European grain receivers are well founded. As in similar investigations during previous years a number of cargoes of corn were examined, and the grain in some of the holds was found to be hot and in a badly damaged condition, even though it carried a certificate of No. 2 Prime Sail. The dissatisfaction on the part of foreign dealers has become extremely acute, and it is evident that if conditions do not show improvement our export grain trade will be seriously affected.

Inspecting and Grading Commercial Grain.—While many of the influential grain dealers of the country are working hard to bring about a more satisfactory and uniform system of inspecting and grading grain in the various markets, it is believed, as stated in my last annual report, that the end to be attained can be brought about only through National inspection of all grain entering into interstate and foreign commerce.

Measuring Moisture Content by Electricity.—As a result of work conducted by the Bureau, an electrical method for the rapid measurement of the moisture content of grain, requiring only two or three minutes for a determination, has recently been devised. This method can be used in cars and elevators and will doubtless prove of great value in connection with the grading of grain."

GRAIN INSPECTION AT CHICAGO.

On November 23 the State Grain Inspection

RETIREMENT OF REYNOLDS BROS.

An announcement of unusual interest to the grain trade was made on November 14, when Reynolds Bros. of Toledo, O., notified the grain trade of their intention to retire from that branch of their business. The news came as a surprise to the trade in general, as the members of the firm were among the oldest grain merchants in Toledo, of the broad-gauge, active and progressive type, and it was generally thought by their home town friends that they would "die in the harness." Their determination, therefore, to take down their sign as grain merchants is much regretted by their friends in their home town as well as by their many customers at country points.

In 1868 S. C., W. R. and W. B. Reynolds of Jackson, Mich., purchased the Armada Mills at Toledo. S. C. Reynolds assumed the active management of the business and made Toledo his home. His brothers remained in Jackson. The milling business grew, as did also a grain business, which had crept into the mill business until it became a case of the "tail wagging the dog." They then disposed of the mill to Frank N. Quale, who, after operating the same for a number of years, sold to D. W. Camp, who, with his son, still operates it as the Toledo Grain & Milling Co.

Freed of the mill, the energies of the Reynolds Bros. were devoted entirely to the buying and selling of grain. They were never speculators.

of the entire grain trade will go with the Reynolds Bros. in their retirement from active participation in the grain business.

CHICAGO WEIGHING DEPARTMENT MEETING.

Chief Weighmaster H. A. Foss presided over a meeting of the Chicago Board of Trade Weighing Department in the flaxseed inspection room of the Board of Trade Building on the evening of November 14. There were over 100 members of the department present, as well as guests, who included Edw. Andrew, chairman of the weighing committee of the Board, Fred. D. Austin, Judge Fiske, Clarence H. Thayer, Frank B. Rice and S. S. Tanner of Miner, Ill.

Mr. Foss had some unusually good words to say to the "boys" and Assistant Weighmaster A. E. Schuyler read extracts from a number of letters from country shippers that solved the question affirmatively that country shippers are satisfied with Chicago weights.

Charles Walker gave an interesting talk on "The Experiences of a Deputy Weighman," and Duncan Bowden gave a number of suggestions to the deputy weighmen as to improvements along lines of clearness and conciseness in their reports.

George W. Metcalf read the following paper on



C. L. REYNOLDS.



S. C. REYNOLDS.



F. J. REYNOLDS.

Department extended its new method of grain inspection by sample in the downtown office to all the roads entering Chicago. It being a dark and rainy day, the immediate result was that out of the 977 cars received on nine principal Western grain roads only 395 came on sale during that day's market, the bulk of them coming up too late to secure satisfactory results. Many of the receivers who had grain in over the various roads did not receive a car in time to sell it, while their neighbors were more fortunate. Out of 135 cars of all kinds of grain received over the Galena division of the North-Western Road only 41 cars reached the market.

Some of the receivers were ready to believe in the day's experience that "in the rush season the new plan will take an enormous force and greatly increase the expense if the trade is given as efficient service as it has been getting under the old system."

Later on, however, the objectors began to give way, for as the new system becomes more and more a matter of routine like the old one, the imperfections and delays of the first day or first few days have disappeared and the new system is now working as to time quite as satisfactorily as the old.

All the same the Board still refuses to allow the Department to sell its samples of grain at 15 cents the sample on the floor of the Exchange, many receivers preferring to pay 20 to 25 cents per sample out of their own pockets to their agents.

New Orleans in November exported 376,516:50 bushels of wheat and 201,428:32 bushels of corn.

but bought, shipped and sold the actual grain, being pioneers in bringing grain East from "beyond the Mississippi" until in 1885 85,000 car-loads were handled by this firm.

While the firm name of Reynolds Bros. had been retained until the close, the interest of W. R. Reynolds had years ago been assumed by his son, Charles L. Reynolds, and that of W. R. by Frederick J. Reynolds, son of S. C. Reynolds. Their banking interests had grown to such an extent that it became their intention, as announced, to give more of their personal attention to that branch of their investments and yet feel at liberty to take a little vacation when so disposed, after having been tied down for forty years, always within reach of the telegraph and telephone. S. C. Reynolds and his son, F. J. Reynolds, are directors in the First National Bank, and the latter is vice-president of the institution. C. L. Reynolds is president of the Toledo Savings Bank & Trust Co. and a director in the Second National Bank, while S. C. Reynolds is a director in the Wabash and the Wheeling & Lake Erie Railroads. He is also the largest stockholder in the Toledo Produce Exchange Building and in addition owns several valuable pieces of realty.

Many anecdotes could be related of Colonel S. C. Reynolds. When things were dull on "change," if the colonel could be prevailed upon to sing "Should Old Acquaintance Be Forgot," or "The Moon Is Shining Bright Upon the Wabash" and all joined in the chorus and a hearty laugh, affairs became rosy again.

It is not too much to say that the good will

Do weighmasters' car-condition reports have the same standing among the railroads and with the grain trade as their certificates of weight?

Some days ago, while in our office, Mr. Foss showed me a letter addressed to him from the freight agent of one of our extensive grain-carrying railroads, concerning the subject of leakage reports. This letter, I am sorry to say, indicated clearly that the railroads feel that the weighmaster's car-inspection records generally are somewhat exaggerated. The letter said:

"I believe your department has done more than all others combined to call intelligent attention to the important subjects of proper cooperage and weighing of grain for shipment. You were kind enough to furnish me with a supply of your admirable pamphlets entitled 'Cloth, an insurance against leakage of grain,' and I sent numerous samples of this pamphlet to all of our agents in grain-producing territory. I cannot help believing," continued the freight agent, "that our action had a salutary effect."

The freight agent then goes on to say: "An official of a grain dealers' association recently informed me that a comparison made at Kansas City showed 42 per cent of the arrivals were leaking and at Galveston 50 per cent. I can scarcely bring myself to believe," reads the letter, "that that condition exists—42 per cent and over. Our superintendent of terminals stoutly denies such a possibility. I am also advised," continued the freight agent, "that diagrams are executed, indicating where the supposed leaks have been found, and that these diagrams are in turn transmitted to shippers attached to weight tickets."

This same claim agent, at a later date, wrote another letter to Mr. Foss, which I was privileged to read, and which also referred to the subject of leakage reports. It read as follows: "My own judgment is that many of the cars denominated as leaking by terminal inspectors, operating in the interests of the shippers, do not in fact leak

an appreciable quantity of grain; and I look with considerable apprehension upon the situation which is now apparently developing. It seems," continued the freight agent, "that the inspectors at one market are vying with those of another in the number of bad order and leaking cars recorded."

That this freight agent mentioned did not refer to our own weighing department is indicated by his final statement to Mr. Foss, which says: "Please do not attribute this reference to your department."

Perhaps this railroad man had in mind the reports a few terminal weighmasters have recently sent out relative to leakage. For example: Not long ago I read in one of the grain journals weighmasters' condition reports as follows: "Baltimore cars leaking, 72 per cent." "Superior cars leaking, 50 per cent." The Kansas City and Galveston weighmasters' reports also showed what appeared to be enormous percentages. Now, I am not by any means intimating that these reports are untrue. Please do not put such an interpretation on my remarks, for I have no right to doubt these statements. I have no right to doubt the accuracy of the report showing 72 per cent of the cars arriving at Baltimore leaking grain. But on the other hand, if perchance such a large percentage of leakage is ever shown at Chicago, I sincerely hope Mr. Foss will not publish it. Right here let me assure you that my only object in referring to the matter is to show how such published reports of seemingly improbable conditions cause the railroads to doubt the accuracy of all weighmasters' records of leakage, no matter how intelligently, how honestly and how carefully those records are made.

Our own instructions in the matter of condition reports are clear and intelligent. "Do not report a car leaking when there is doubt in your mind as to whether or not there was any leakage," has been told us time and again. For my part I cannot imagine a deputy weighmaster recording imaginary leaks if he has performed his work honestly and conscientiously. If we weighmen put true reports of each car on the records; if we see that each car is swept clean of all grain; if we see that the regulations are all enforced; if we see that the weighing is made forthwith and is correctly done—why should it be necessary to fall back on any imaginary leaks? Surely there are enough bad order cars to keep us busy.

Now, I quite agree with all reports to the effect that a large part of the car equipment at the present time is in a deplorable condition. Railroad yards everywhere show this to be true. During the handling of the new wheat crop the loss through leakage in transit was enormous. Even now you will find everywhere cars containing grain marked: "Not fit for grain," "Bad order—Transfer," "Not fit—Send home when empty," "Bad order—Look out." Nevertheless, I know, as far as Chicago is concerned, that 72 per cent of the cars do not arrive leaking; and it is quite natural for railroad officials to deny stoutly such a probability.

In closing my remarks I would like to emphasize the great value of clear and complete descriptions of each defect in a car, which concerns the loss of grain, by reading a resolution which was passed at a recent meeting of grain shippers held in St. Louis. The resolution says:

"Whereas, The shipper is entitled to all information that affects the quantity of grain to be delivered by the carrier; and

"Whereas, It is the duty of those in charge of the unloading and weighing of grain to look for defects in cars and any leakage of grain therefrom and to record and report to the shipper or his representative the results of such examination; and

"Whereas, There are some terminal markets which are lax in furnishing this information; therefore, be it

"Resolved, That we, the members of the Grain Dealers' National Association, in convention assembled at St. Louis, this the 17th day of October, 1908, do hereby request that all markets furnish the shipper a complete account of any defects in cars; of any evidence of repairs in transit that indicate loss; and of any leakage of grain."

In conclusion I would like to suggest that we reply to this resolution by sending to the secretary of the association which passed it the following message:

"The employees of the Department of Weighing of the Chicago Board of Trade, assembled together to talk over matters affecting the work of deputy weighmen, after a careful discussion of the car equipment problem, have this to say relative to the resolution adopted at your last annual meeting at St. Louis, concerning the making of a careful examination of each car containing grain, and the recording and the report-

ing of the results of such an inspection, which resolution was recently published in the papers:

"That each and every shipper of grain and his agent may be assured of the efforts of the employes of the Chicago Board of Trade Weighing Department to have a true and accurate report of the condition of each car we examine put on the records. We consider this among the most important of the multitude of duties a deputy weighman is supposed to perform."

J. A. Schmitz, scale expert for the department, gave a short talk on the importance of taking the best care of scales in the wintertime by looking out for troubles due to snow, ice, etc.

There were short talks from some of the guests present, including Edward Andrew, C. H. Thayer, Frank Rice, Fred D. Austin, Judge Fiske and S. S. Tanner, after which the meeting adjourned.

PLANT OF THE AVERY SCALE COMPANY.

We show to our readers, in the accompanying illustration, the shops at North Milwaukee, Wis., where the Avery Automatic Scale is manufactured. This scale, first made in England, and said to be the first successful type of automatic scale made, has grown rapidly in favor in this country and is now doing good service in a large number of elevators and mills.

The building is a brick structure 80x160 feet and was completed in September, 1906. A new

[For the "American Elevator and Grain Trade."] CONFIRMATION AND GRADES.

BY J. L. ROSENBERGER,
Member of the Bar of Chicago and Cook County.

After negotiations between representatives of an elevator company and those of a mill company, the elevator company wrote to the mill company:

"We hereby confirm sale to you by our Mr. _____ of 2,000 bushels, more or less, of No. 3 wheat at 69½ cents, and 1,000 bushels, more or less, of No. 2 wheat at 71¼ cents. This wheat is to be taken out and paid for some time within 30 days from date."

The Supreme Court of Minnesota holds (St. Anthony & Dakota Elevator Co. vs. Mill Co., 116 Northwestern Reporter, 935) that the agreement of purchase was not completely merged in the letter confirming the sale; that the grade of grain mentioned in the letter was merely descriptive of its character and did not constitute a warranty as to quality; and that, having inspected and accepted the grain without objection, the mill company was bound by the terms of the purchase.

The court says that the writing did not purport to contain the entire transaction and was not necessarily complete. It was competent for the elevator company to show that the writing



PLANT OF AVERY SCALE CO., NORTH MILWAUKEE, WIS.

storeroom was added in February, 1908. It is equipped with modern machinery and tools and is especially constructed for scale work. The general offices are located in the northeast corner of the building and a branch of the Chicago, Milwaukee & St. Paul Railroad runs into the shops, so that scales may be loaded directly from the erecting floor. About thirty workmen are employed in the various departments.

One of the features of the plant is the testing elevator, where all scales are thoroughly tested before being shipped to the purchaser. It is equipped with two legs with 3,000 bushels' capacity each, and the greatest care by skilled workmen is taken in this part of the work. A 60-horsepower gas engine and gas power producer furnish the power for operating the plant.

The officers of the Avery Scale Co. are C. F. Beakbane, president, and N. C. Webster, secretary-treasurer and manager. An efficient corps of salesmen is employed and the company is now represented in every state in the union. An idea of the business done is shown by the fact that several hundred scales have been shipped out since the company started to manufacture and the business has been gradually increasing.

The receivers of the Minneapolis & Northern Elevator Co., subsidiary to the Pillsbury-Washburn Co., reports total assets of \$923,578.53 and liabilities of \$1,138,209.67. The company owns 80 elevators and coal sheds through Minnesota and the Dakotas and the report shows that the elevator buildings and equipment are worth \$711,381.07 and its dwelling houses \$11,718.55

was not intended to be a warranty of No. 2 and No. 3 wheat, but that the mill company purchased the wheat which was in the several bins.

Under some circumstances, such a writing might be considered as a warranty of the quality; for instance, where the parties are conducting business in different localities and a purchase is made in the open market. Under such circumstances, the purchaser would have a right to insist that if No. 1 wheat was ordered the seller, in accepting the order, guaranteed to deliver that particular quality. This case, however, presented an entirely different proposition.

Here the mill company was informed that this was all the wheat the elevator company had for sale; that it was located in certain bins; that the mill company might have it at certain prices; and pursuant to the mill company's inspection of the grain a sale was consummated. Ample opportunity was afforded the mill company for inspecting and rejecting the grain as it was delivered. It not only failed to do so, but, on the contrary, accepted and used a part of the grain, sold the remainder, and two weeks afterwards wrote to the elevator company asking to be relieved from its contract upon the ground that on account of the size of its mill it was impossible to use the wheat. That the parties came to terms was clear from their course of dealings, and the letter referred to could not be taken as a full expression of the contract. The reference therein to No. 3 and No. 2 wheat was merely descriptive, and not a warranty.

SCALEAGE AT BALTIMORE.

The complaint of the Baltimore Chamber of Commerce against the Pennsylvania Railroad Co. and others, operators of public grain elevators at Baltimore, was heard by the I. C. C. at Washington on November 18. It concerned the matter of "scaleage deductions" mentioned in the "Local Freight Tariff of Elevator and Other Charges made by the Central Elevator Co. on Grain in Their Elevators at Baltimore, Md.," said charges named being "in addition to the rate for transportation." The complaint having been set out at length in the "American Elevator and Grain Trade" in the November number, the reader is referred to that article (pages 251-2).

The proceedings of November 18 were directed wholly to the taking of testimony, the object of which, on the part of the Chamber of Commerce, was to establish the point that there is practically no shrinkage of grain in the passage through an elevator. The experts, like Mr. John Dower, supervisor of weights at St. Louis, and Mr. Foss, chief weighmaster at Chicago, testified to the effect that there was an "invisible loss." It also appeared from this line of testimony that the "scaleage" ("dockage" elsewhere) has been abolished at many of the principal terminal markets of the country.

The defendant companies testified that the "invisible" loss was, in fact, of so great an amount that they had been compelled to purchase grain to make up this loss by shrinkage in order to be able to deliver the amounts represented by their warehouse receipts.

It appeared on the cross-examination of the defendants' witnesses that it was the elevator practice to throw the car sweepings into the harbor, and to realize nothing from them at all, whereas at other markets the sweepings are sold for feed and bring from \$10 to \$17 a ton.

THE COMPLAINANT'S CASE.

On November 28, the case on the part of the Chamber of Commerce was submitted on printed brief by Attorneys A. S. Brown, John B. Daish and R. E. Lee Marshall for the Chamber of Commerce. The complainant's brief, as filed, submits that these "scaleage deductions" are:

Unnecessary, certainly in the amounts specified in the tariffs; that the practice is undesirable, unbusinesslike and immoral; that the practice is unreasonable and unjust; that similar practices have been abolished and never existed except at Philadelphia (where they are less in amount and differ in character and kind), and, being merely incidental, ought to be absorbed, as all losses incidental to any other business are; that "scaleage deductions" are unjustly discriminatory, in that they do not prevail at competing Atlantic ports; that they are unduly prejudicial to the merchants engaged in the grain trade of Baltimore and to the port of Baltimore and shippers of grain to that port, in that no such burden is imposed upon other competing markets and that the practice does not exist and is not threatened elsewhere.

The brief further declares that if these "scaleage deductions" are enforced they will constitute an arbitrary, unjustifiable and illegal appropriation of property and moneys of the members of the Baltimore Chamber of Commerce and others and that they are not in any true sense a rate or charge either for elevation, storage or handling within the meaning of the interstate commerce act. It is contended that the railroads receive ample compensation for the transportation of grain and for all services incident to the receipt, delivery, elevation, handling and storage of grain at Baltimore, and that while the "scaleage deductions" are not rates, charges or exactions within the meaning of the commerce act, they are a regulation or practice affecting rates, therefore preferential to the grain trade of competing localities. Discussing the expression "scaleage," the brief says:

"Scaleage" is a recently coined word, which Pennsylvania Railroad tariff No. 433 and Baltimore & Ohio Railroad tariff 5529 apply to a new thing, just invented. The lexicons (Webster, Worcester,

Century) do not contain the word, and it does not appear in the law dictionaries or encyclopedias or in the Dictionary of Words and Phrases.

Mr. Dower, supervising weighmaster at St. Louis, assumes that the "take-off," long since forbidden there, was, while it existed, an equivalent; and Mr. Foss thinks that the evil practice, "dockage," once tolerated in Chicago, but now abandoned by all the elevators there, including that of the Pennsylvania Railroad Company, defendant here, was a similar thing to "scaleage" in Baltimore and Philadelphia prior to November 16, 1908. The testimony shows that the exactation, reduction or practice has been imposed at Baltimore and Philadelphia and at no other Atlantic ports; that at some of the important grain centers of the interior it formerly prevailed, but that, one by one, they have all now abandoned it as unjust and improper, and that at other grain markets of the West the practice never existed.

Prior to November 16, 1908, Baltimore and Philadelphia alone were subjected to and carried that burden in competition with their rivals on the seaboard for the benefit of the railroad terminal grain elevators—absolutely essential instrumentalities and facilities of interstate and foreign commerce in grain, constituting at those ports, respectively, "virtual monopolies," standing in the "very gateway of commerce." Having thus selected Philadelphia and Baltimore for this exceptional exactation, and having kept them in a class to themselves, Baltimore is now chosen as the subject for a new and severer experiment, to be tried on her alone, whether as "*experimentum in corpore vili*," or because her vitality is assumed to be so great as to enable her to stand anything that the railroads may prescribe or administer, does not clearly appear from the testimony in the case. But whatever the motive may be, the fact is indisputable and is indeed confessed.

The purpose of the "scaleage deductions" as set forth in the Baltimore & Ohio supplement to the grain tariff is that they are "to cover loss incident to the handling of grain," which the notification to the patrons of the elevator said would be reduced at the end of the year if it should appear by a "cut-off" that the deductions named had been excessive. But in discussing the matter of shrinkage, the complainant's brief lays some stress on the fact that considerable testimony was adduced at the hearing of November to show that there was an "invisible loss" or shrinkage in grain passing through an elevator, yet the defendants' own witnesses testified in a manner to show that some of this loss was due to the manner of handling the grain. The brief in this connection says:

There is testimony about three practices to account for these losses. It appears that the Canton elevators are in the habit of throwing sweepings, being grain, dust, dirt, small particles of grain, chaff, etc., which rattles down through the openings in the spouts, into the harbor. The Locust Point elevators, operated by the Baltimore & Ohio, follow the same practice and apparently to a larger extent. It is admitted by one witness that these sweepings are "considerable," and that the Locust Point elevators are "filling up the harbor" with sweepings; yet these sweepings have a commercial value and are saved elsewhere. The witness Foss, speaking for Chicago, states that they are sold for feeding purposes, chiefly to sheep feeders, and have brought as high as \$17 a ton; and the witness Dower testifies to the same practice for St. Louis, stating that the elevator people there get 50 cents a hundred for the general dirt off the floor, being the dirt which goes over the riddle (shaker or screen). A second reason for the disappearance of grain is to be found in heavy outloading. An example of this kind is the loading of 646 bushels for the account of Gill & Fisher on the steamer Crosby February 4, 1908. This grain was put on board over the protest of the deputy weigher, and the elevator company refused to admit the error.

Further, it appears that the last two or three years have been unusual years, and that during the last year there was an unusual amount of wet and heated corn. Substantiating this fact, we also learn that the Baltimore & Ohio elevators have not infrequently been able to sell and have sold grain resulting from overs, and the present condition of the Pennsylvania elevators is such that they are materially over, being over 4,300 bushels of wheat and 700 bushels of rye, but the corn is 500 bushels short.

The complainants contend that the defendant elevators are able to protect themselves from losses in weight incident to the handling of moist corn by ordering it to the drier to be dried at the

expense of the owner, and that it is the duty of the railroads to protect themselves against grain getting out of condition by the use of ordinary care.

At any rate, whatever may be these "invisible" losses, or losses "incident" to handling the grain, the tariff precludes their being burdened upon the patrons or bailors. The advantage of mixing goes to the elevator operator and "far more than compensates the proprietors of elevators for any losses which may result incident to the handling of the grain."

The law (Van Zile, "Bailments and Carriers," 2d ed., 1908) recognizes this legality of the mixing of grain, but it insists that the elevator man must return to the owner the "like quality, quantity and value" of grain he received, and is liable if he fails to do so. Scaleage deductions at Baltimore, therefore, are discriminating in a double sense—markets which do not suffer them are favored by shippers and those which have them, but of less amount than are taken at Baltimore, are favored.

THE DEFENDANTS' CASE IN PART.

The reply briefs of the defendants in this case are not yet all ready, but the missing ones will be filed shortly. That of the Baltimore & Ohio R. R. Co., however, is before the writer, and from it the position of that company may be summarized as follows:

There are but two questions presented for the consideration of the Commission: (1) Are the scaleage regulations unjust and unreasonable in violation of the Act to regulate commerce; and (2) do they create an unjust discrimination or disadvantage as against the grain trade at Baltimore?

Having quoted the rates, the brief notes the fact that a system of scaleage has always obtained at Baltimore, but was not published in the elevator tariffs until November 16, 1908. These scaleage rates have been sanctioned by the Chamber of Commerce since 1902, and the latter's weighing department has co-operated with the B. & O. R. R. Co. in making these scaleage deductions, which were 30 pounds per car on all cars weighing 66,000 pounds or less and 50 pounds per car on all cars weighing over 66,000 pounds, said grain being for export, while for domestic delivery it was 100 pounds on each car. Measured by percentages, the new tariff deductions are the same as previously obtained, except as to corn in cars for export, which are now twice as great on mixed and No. 2 yellow and white corn and 3-20 of 1 per cent against 1-20 of 1 per cent on other grades of corn. In addition to these changes in the amount of the deduction, the tariff complained of makes the following changes in the method of taking the deductions:

(a) Until November 16, 1908, scaleage was deducted prior to the issuance of the certificate, which, therefore, showed the net weight. As above stated, this was done under the authority of the Chamber of Commerce. The certificate now shows (1) the actual weight on arrival, (2) the amount deducted for scaleage, and (3) the net weight.

(b) Freight was formerly paid on the net weight. It is now paid on the actual weight.

(c) Storage and elevator charges were formerly paid on the net weight. They are now paid on the actual weight.

The testimony of all the witnesses shows that there is a loss of weight to grain while in elevator, due to evaporation and removal of the natural dirt by blowing to keep it in condition; and the scaleage deductions as now taken are estimated to be no greater than is necessary to cover the actual loss in weight sustained by the grain while in the elevators. The deductions to equal such loss vary, of course, from year to year, according to the condition of the grain of the year, but have in this case been estimated on past experience.

The B. & O. contends that, "It is reasonable that the owner of the grain should bear the loss in weight while in the elevator." If each owner's

grain could be separately binned the loss would be a definite amount, ascertainable on delivery of the grain; but as grain of the same grades is necessarily mixed in store, if there were no deductions made to offset the loss in store, the owner on delivery would actually receive more grain than he deposited, and the elevator would have to procure elsewhere a sufficient amount of other grain to make up the loss due to shrinkage," not because of any fault of its own, but because it is the nature of grain to lose in weight. "It is for this reason that the elevators at Baltimore have always issued receipts entitling the holder to a weight less than that actually deposited. This result was formerly accomplished by issuing the certificate for the amount received less the scaleage. The certificate now shows the amount deposited, the scaleage, and the amount which will be delivered. This is believed to be eminently just, so long as the scaleage deduction does not exceed the amount which the grain will lose in weight. The present method is the only one whereby the elevator can protect itself and at the same time show exactly and clearly the nature of the transaction.

"In attacking the scaleage deduction as unfair, the complainant adopts an attitude wholly inconsistent with its general attitude regarding loss in weight of grain while in the elevators. The obligation of the owner to bear all material losses in weight in such cases is universally admitted. Such are losses from drying in the driers, loss from screening and blowing, loss from deterioration where grain is posted and the certificates called in in accordance with the contract between this defendant and the Chamber of Commerce. If the owner acknowledges his liability for these greater losses, there is certainly no reason why he should seek to lay the smaller ones covered by scaleage upon the elevators. Comparable to the losses in weight covered by scaleage are the loss in weight during ocean passage, which the owner assumes up to 1 per cent, and the loss in weight by natural shrinkage during rail transportation, which is imposed on the owner by the first clause of the uniform bill of lading."

That the deductions are not unreasonable is shown by the fact that the railroads have lost money operating these houses under the former scaleage rules.

In answer to the charge of discrimination against the port, it is said that, "Scaleage has not in the past interfered with the prosperity of Baltimore." The scaleage has been taken at Baltimore during the past six years (at least), when Baltimore exports increased 88 per cent to New York's 65 per cent. The trade knew Baltimore has been taking scaleage, and scaleage now exists at the competing points—at Boston (sufficient to protect themselves), Philadelphia (same as Baltimore prior to November 16, 1908), New Orleans (120 to 200 pounds) and Galveston (same as Baltimore). The actual increased cost to the owner by these deductions in a matter of 100,000 bushels of export corn, valued at 70 cents a bushel, would be \$31.90 scaleage, 34 cents for elevation and \$3.06 for freight, a total of \$35.30, or 35-100 of 1 mill per bushel. "On the other hand, it is to be noted that the crop may be actually worth more after elevation."

The brief concludes:

"There seems to be a feeling, not so much expressed as intimated, that the publication of these charges in and of itself will operate to the disadvantage of Baltimore. If the charges are required to be published, this defendant has no choice in the matter, so that no claim of this kind can be made. The port of Baltimore is this defendant's port of export for grain. Any injury to Baltimore as a port of export would injure directly the traffic and revenues of this defendant. This defendant believes that, in this matter as in other business transactions, honest and open dealing will win confidence and bring trade. As a matter of fact, the shippers of grain have known and know that deductions have been

and are being made to cover loss of weight in elevators; but, were it otherwise, their ignorance would be no sound basis for Baltimore's export business. Permanent trade cannot be built up on deceit. This defendant believes that shippers will prefer a port where every rule of practice affecting the trade and determining the whole cost of export is open and published."

DOCKAGES IN GENERAL AND THE SHIPPER.

The question of docking weights of grain at terminal markets has finally reached the Interstate Commerce Commission. As outlined above, the Commission, sitting at Washington, has heard evidence in the case of the Baltimore Chamber of Commerce, complainant, vs. the Pennsylvania, Baltimore & Ohio and other railroads, and the Central Elevator Company. The petition of the complainant asserts in substance, as has been seen, that the defendant railroads, after November 6, 1908, will deduct from each and every car of grain transported to and delivered into their elevators certain proportions of the contents of such cars. In other words, it is charged that the railroad companies operating elevators at Baltimore intend to deduct a certain amount from the weight of each car unloaded.

It would seem, however, that the incidence, or burden, of this docking of the weights of such cars is not to fall on the Western shipper (consignor), as is the practice at many markets, except as shippers have been notified by circular of the Chamber of Commerce bearing date November 24, 1908, but will fall on the buyer or owner of the grain; that is to say, the owner of the grain after it has been delivered to the elevator scales at Baltimore will be charged a certain amount for a possible shrinkage on his grain while in store. In this connection, the railroads' published tariff that is causing the Baltimore controversy, says:

Elevators will issue certificates for the actual weights of grain received, and elevator charges will be based thereon. The certificates will also show the amount of scaleage allowance to be deducted when delivery is effected. Freight charges will be collected on actual weights.

It seems from the testimony given and statements made at the hearing of this case before the Commerce Commission that heretofore a secret dockage has been taken at Baltimore, the entire burden of which has fallen upon the Western shipper. This dockage was secret in that the certificates of weight issued by the weighmaster certified to what was supposed to be the actual weight of the grain in each car, without mention of the fact that a certain amount had been deducted before arriving at that weight. The lawyers for the defendants in this case contend that the practice of secret dockage from the actual weight of grain is unlawful, illegal and criminal; wherefore, under the new published arrangements of the railroads at Baltimore all secret deductions will hereafter be eliminated and any possible loss due to shrinkage in the handling of grain through the elevators there will be placed on the shoulders of the man who stores it or has it transferred to vessels for export.

This brings up the same old question, Who should bear the loss consequent to handling grain? The farmer, for his part, expects pay for all the grain he sells and delivers to the country buyer. He can see no reason why he should be charged for any possible shrinkage that may occur in the handling or the storing of that grain at some future time or place after it leaves his possession and ownership. Similarly does the country buyer view the matter when he sells his grain to the distributor, elevator man or exporter at the terminal market. As a matter of fact, the country buyer (shipper) has far more reason to complain and protest against this vicious practice of what elevator men are pleased to term "taking scaleage," for they not only have to bear the loss due to the shrinkage through their own country elevators, but also some of the

shrinkage that occurs in transporting the grain to the terminal markets, such as is caused by leakage, evaporation, loss in handling the grain from his elevator to the car and from the car to the terminal elevator scales. The shipper is compelled also to sell the grain on the basis of the weights determined at the terminal elevators, and, in consequence, he bears the brunt of any carelessness, waste, errors and dishonesty that may occur there.

In this regard elevator men at many of the terminals are in an enviable position, for they are able both to buy and to sell on the weights determined at their own markets. Thus, liability of loss during transit, or through any cause whatever, is thrown on "the other fellow," and when one stops to consider the many causes for short weights obtaining while grain is being carried by the railroads from point to point, it can be plainly seen that such terminal men are at a great advantage. As a matter of fact, the shrinkage due to the handling and storing of grain in any elevator or warehouse, either public or private, should not rightfully or legally concern in any way the country shipper who sells his grain f. o. b. track or after he sells it to some terminal commission house, and any attempt to saddle such loss on him, secretly or otherwise, should be condemned. There is no possible excuse for the further toleration by shippers of such a pernicious practice as deducting any amount from the actual weight of grain that is made the basis of settlement between the country shipper and the terminal buyer.

It is plainly to be seen, then, that the shrinkage due to handling, cleaning, transferring or storing grain in a terminal warehouse is a matter between the warehouseman and the owner of the grain, and does not concern the farmer or the country shipper. The warehouseman and the buyer (or owner) of the grain, therefore, should adjust the question of elevator shrinkage among themselves, either by keeping each man's grain separate and charging the exact amount of shrinkage on the different lots to the owner of the grain, or else the warehouseman should base his handling and storing charges on the estimated loss in handling to be ascertained by scientific investigation.

It seems that this same question, Who should stand the shrinkage? is to be thrashed out at the next annual convention of the Lake Carriers' Association, in January probably. According to the reports from Buffalo, there are many vessel men who strongly object to the custom in vogue on the lakes, which compels the lake carrier to bear the loss of the frequent and unusual variations in the weights of cargoes between the different lake ports.

LEAKY CARS.

The efforts of the Wisconsin Grain and Warehouse Commission, by advertising conditions, to reduce the number and proportion of leaky cars to the whole number received at Superior has been bearing some fruit. The first report, which was for September, showed a surprising condition. About 6,000 defective cars were listed. The numbers of these were taken and reports made, showing whether the leaks were at the sides, ends, bottoms or at the doors. The report for October, when the commission weighed but a few less cars than in September, the total being 10,522, of which 4,832 were defective, showed an improvement of about 1,000 cars as compared with the previous month.

At St. Louis the cripes continue to come in, there having been in October no less than 2,260 of them as reported by Chief Supervisor John Dower of the Department of Weights of the Merchants' Exchange. Of these 387 leaked at grain doors, 34 over the door, 1,099 at the boxes and 29 at end window, while 398 were not sealed, 260 were without seals at end window and 53 had end window open.

ALLOWANCES AGAIN.

The Interstate Commerce Commission on November 24 again deferred the time for the taking effect of grain the elevator allowances order to July 1, 1909, and recommended that the roads make no changes in tariffs.

This action is the result of protests by elevator men in all parts of the country. On November 14 the following statement was issued:

The undersigned, shippers and members of the Chicago Board of Trade, having noticed certain statements in the daily press to the effect that the Chicago Board of Trade is not averse to the abolishment of so-called elevator or transfer allowances and is in agreement in this matter with

rates, based upon continuous transportation and lessened cost of service by reason of such continuous transportation, and lower than the through rates now established, which are based on Omaha or Kansas City combination, thus depriving the St. Louis market of natural advantages and of the lower transportation charges to which it is entitled.

ILLINOIS GRAIN DEALERS AT THE CORN EXPOSITION.

A circular letter issued by Secretary S. W. Strong of date November 20 stated that inasmuch as the Illinois Corn Exposition was to be held



GRAIN MEN EN ROUTE TO THE CORN SHOW.

those railroads which are favoring the cancellation of tariffs authorizing such allowances, desire to state that there is no basis in fact for such an announcement by the press, since this question has not and could not properly at this time come before the Board of Trade or their directors in such a way as to cause them to officially commit themselves.

The Board of Trade has consequently made no announcement on the subject and taken no official action in the matter. The undersigned, however, are absolutely opposed to the cancellation of such transfer tariffs and it is their intention to effectively exert their efforts to prevent such cancellation.

The statement is signed by J. C. Shaffer & Co.; W. H. Merritt & Co.; Peavey Grain Company; James Pettit, president; Nye & Jenks Grain Company; James Bradley, secretary; Mueller & Young Grain Company; Samuel Finney; H. W. Rogers & Bro.; Burns-Yantis Grain Company; E. W. Wagner; the Quaker Oats Company, by J. C. M.; Interstate Elevator Company, E. W. Elmore; Armour Grain Company, G. E. Marcy, president; Hooper Grain Company, J. K. Hooper, president; Bartlett, Patten & Co.; Lord & Garland; Rosenbaum Bros., E. L. Glaser, president; E. R. Bacon; Prairie State Grain & Elevator Company, Frank M. Bunch; Western Elevator Company, R. E. Tearse, treasurer.

The elevator interests, as the result of a conference held a few days prior to the promulgation of the above notice at Chicago, decided to bring two suits in the courts to test the Commission's power to abolish the allowances, called "transfer tariff."

The Omaha Elevator Co. will sue the Union Pacific Railroad Co. on its contract for elevation and the railroad will plead the decision of the Interstate Commerce Commission in defense, while the Kansas City Board of Trade will bring suit to enjoin the railroads and the Commission from enforcing its order in what is known as the Missouri River case, which declared all elevator allowances to be illegal.

In these actions the elevator men of Buffalo, Toledo, Pittsburgh, Mansfield, Louisville and Indianapolis will join those of Chicago and Missouri River points.

At St. Louis the receivers, in the event elevation is continued on the Missouri River, will renew their offers for the establishment of through

in Springfield on November 23 to 28, and that many of the members of the Illinois Grain Dealers' Association had written saying they would attend, President Wayne had fixed the 27th and 28th as a "Grain Dealers' Day" and that all the members of the Association and the commissioners from Illinois were invited to attend those days.

The executive committee, the board of arbitration and other important committees of the Association accordingly met at the St. Nicholas Hotel, Springfield, at 10 a. m. on November 27. President E. M. Wayne of Delavan called the meeting of the executive committee to order and Secretary Strong of Pontiac read the minutes of the last meeting, which were approved as read.

Secretary Strong then brought up the matter of former complaints relative to the delay in the inspection of grain after arrival of the grain at the Baltimore market. The report of the committee appointed by President Wayne, viz., Messrs. Louis Müller Co., Hammond, Snyder & Co., and Pitt Bros. Co. of Baltimore, has been made and it stated the committee had found no delay in inspection of grain arriving via the Baltimore & Ohio or Pennsylvania railroads. The report concluded that with the new 1,000,000-bushel Pennsylvania Elevator in operation shippers would have the assurance of no congestion for the future in the Baltimore port.

Secretary Strong said that no report had been heard from the committee which met in Chicago on November 4, to take up the matter of interest charge on track sales and consignments.

Mr. Wayne said the charge of interest on consignments was probably right, but there should be a time limit to same. He thought the limit should be the time when the grain was inspected and not when it was unloaded.

Under the subject of new business H. I. Baldwin spoke of a recent legal decision which is of much interest to the grain trade. The decision ended a suit brought by Edwin Beggs of Ashland against the Postal Telegraph Co. On July 8, 1907, a wire was sent by H. I. Baldwin & Co. of Decatur offering Nye-Jenks Grain Company of

Chicago 75,000 bushels of wheat on the basis of 1½ cents under the September option, delivered Chicago. The wire was filed with the Postal Telegraph Co. at 9:10 a. m. and did not leave Decatur until 9:37. On that morning the September option for the first ten minutes or so on 'Change sold at a price which would have enabled the Chicago house to book the wheat on the terms given; but at no time later during the day, after the wire was received, could they do so. The suit was brought at Decatur and the jury allowed Mr. Beggs 1½ cents per bushel on 75,000 bushels. Mr. Beggs' loss on the wheat when he did sell was about \$3,000, but the jury allowed only the loss which actually accrued on the day of sale.

A. G. Tyng of Peoria spoke about the constant loss of grain in transit due to leaky cars and offered the following resolution, which was adopted:

Whereas, There is a constant and insistent complaint by the country shipper as to leaky cars, in which grain is forwarded from the country station, and

Whereas, The like complaint is made by those who are engaged in forwarding grain from one terminal market to another, or to the seaboard for export, and

Whereas, Experience has demonstrated beyond any possibility for a reasonable doubt that the ordinary box car, in a short time after being put into service, begins to leak when loaded with grain, and thereafter forever, as long as it is in use, leaks and dribbles grain, now, therefore, be it

Resolved, By the board of directors of the Illinois Grain Dealers' Association that the railroad companies be and they are hereby requested and urged that hereafter when placing orders for new rolling stock, and more particularly for box cars, they order cars manufactured from steel, and thus eliminate for all time complaints occasioned by losses from leaky cars.

Resolved, Further, that the secretary of this organization be hereby instructed to forward a copy of these resolutions to each of the general freight agents of the railroads doing business in the state of Illinois and to the trade papers.

On the question of arbitration, Secretary Strong



HARRY G. SMITH AND W. J. CULBERTSON.

said that of the 154 cases before the arbitration committee since June only five were left which had not been arbitrated satisfactorily.

Secretary Strong spoke also of the importance of the subject of claims against the railroad companies and presented the following resolution, which was adopted:

Ordered, that a new committee be appointed by the president, to be known as the "claims com-

mittee;" and that said committee shall consist of three members, of which the president of the Association shall be chairman.

That it shall be the duty of said claims committee to arrange with an attorney to represent the members of this Association whenever called upon to collect from any railroad company or other common carrier any amount lost by reason of the fault of said common carrier.

The said committee shall arrange the terms upon which said attorney shall represent the members; and the committee shall see that no fraudulent claim is filed, nor that any member is allowed to file a claim for more than he is justly entitled to, the whole idea of a claims department being a friendly adjustment of all differences between the railroads and the members of this Association at the minimum of expense and trouble.



S. W. STRONG, BERT A. BOYD, FRANK SUPPLE AND THE BILLBOARD.

The said committee shall not make any arrangement whereby the Association shall in any event become liable for any expense whatever in the prosecution of any claim, but the committee will endeavor to make such a contract as will be equitable and whereby the members will receive prompt and efficient service and every claim bear its own expense of collection.

H. I. Baldwin offered the following resolution, which was adopted:

Resolved, That the directors of the Illinois Grain Dealers' Association are heartily in favor of the adoption by all markets of the uniform grades adopted at the meeting of the Grain Dealers' National Association in St. Louis, realizing that the uniform grades will greatly simplify the handling of grain and be of great benefit to all dealers in this state.

Resolved, That our secretary be requested to write to the secretaries of the boards of trade of all the larger markets, urging their adoption of the uniform grades as mentioned above.

Edwin Beggs moved that the secretary formulate appropriate resolutions on the death of Frank Pratt of Decatur, one of the founders of the Illinois Association. The motion carried.

The city of Peoria was selected as the place for holding the next annual meeting of the Association, the constitution fixing the date, which will be the second Tuesday in June, 1909.

The meeting then adjourned.

The following were among those in attendance:

A. G. Tyng, B. E. Miles, Peoria; Harry G. Smith, Oscar C. White, Gordon Hanna, Henry Stanbery, Harry Miller, P. E. Schifflin, Chicago; Frank Supple, Bloomington; H. I. Baldwin, Decatur; Edwin Beggs, Ashland; Sherman Neiman, Warrensburg; Tom Hanson, Villa Ridge; E. M. Wayne, Delavan; S. W. Strong, Pontiac; H. A. Hillmer, Freeport; Z. W. Graff, McClainsborough;

Lee Metcalf, Illiopolis; Bert A. Boyd, Indianapolis; W. J. Culbertson, Delavan; G. L. Graham, St. Louis; J. E. Collins, Garrett; T. Z. Warner, Chenoa; Frank Umpleby, Pana; John E. Bacon, Chicago; I. F. Twist, Rochester; J. N. Hairgrove, Virden; N. A. Mansfield, Niantic; Abel Brooks, Bloomington.

Marysville; Class K, Licking County; Class L, New Holland High School; Class M, R. K. Bean & Sons, Greenville.

RESULT OF "OLDEST SEPARATOR" CONTEST.

In the August, 1908, issue of this journal Barnard & Leas Manufacturing Company of Moline, Ill., announced that they would pay for information regarding the oldest and next oldest separator of their make in use at the present time. They have finally reached a decision as to who is entitled to the awards, the first prize going to D. Gratz & Son, Tecumseh, Mich., and the second to Geo. Mader & Son, Winchester, Ill. Following is a list, in order of age, of firms using the company's old separators:

- 1867, D. Gratz & Son, Tecumseh, Mich.
- 1868, Geo. Mader & Son, Winchester, Ill.
- 1870, Chas. Tiedeman Milling Co., O'Fallon, Ill.
- 1870, Altoona Milling Co., Altoona, Kan.
- 1870, A. E. Nash, Coggon, Iowa.
- 1873, Valley Mills, Samuel Hinton, miller, Crawfordville, Ind.
- 1873, Thos. Buton, West Side, Iowa.
- 1874, J. L. Adams, Mt. Etna, Iowa.
- 1874, Fred Albrecht & Sons, Staples, Minn.
- 1874, R. J. Megaw, Goderich, Canada.
- 1875, W. L. Mock, Abie, Neb.
- 1876, Valley Park Milling Co., Valley Park, Mo.
- 1877, V. C. Wall, Sherman, Mich.
- 1879, Lord Milling Co., Delphos, Kan.
- 1879, Cologne Milling Co., Cologne, Minn.
- 1879, Phelps & Sibley Co., Lawson Paul, miller, Cuba, N. Y.
- 1880, David Waugh, Wellsburg, W. Va.
- 1882, J. W. Hedges, Frankfort, Ind.
- 1882, J. W. Howell, Bedford City, Va.
- 1882, D. S. Cook & Co., Jas. C. McGee, miller, Basil, Ohio.
- 1882, R. M. Cleveland, Wartrace, Tenn.
- 1882, Wm. Hisey, Sparta, Mich.
- 1882, Jas. C. Poister, Oakland, Kan.
- 1883, B. T. Pillars, Jonesboro, Ark.
- 1884, Acme Milling Co., Corry, Pa.
- 1887, Eph Rowe, Boonville, Ind.
- 1888, Wm. B. Baker's Sons, Winchester, Pa.
- Indefinite, The Pearl Roller Mill Co., Oswego, Kan.
- Indefinite, John Henderson, Fulton, N. Y.
- Indefinite, W. S. Trimble, Dechard, Tenn.
- Indefinite, Henning Roller Mills Co., Henning, Minn.
- Indefinite, Geo. K. Bryant, Salem, Ore.
- Indefinite, Red Cloud Milling Co., John Laughrey, miller, Red Cloud, Neb.

The company very properly considers this list the strongest kind of proof of the merits of their machinery. In one mill they have a separator forty-one years old still running and doing good work; in another, a machine forty years old still in use, and so on down the list. These old



WATCHING THE INDIANS DO STUNTS.

exhibits scoring the highest formed Wayne County's entry in the national show.

The following are the winners of first prize at the Ohio Corn Show at Columbus which ended on November 28: Classes A, B, C and G, together with the sweepstakes prize, G. O. Vanorsdall, Jeffersonville; Class B, W. E. Jeffers, Guysville; Class D, A. H. Powell, Newark; Class F, C. S. Hunter, Seven Mile; Class F, J. L. Keckley,

machines were necessarily rather crude and Barnard & Leas Manufacturing Company have made great improvements in their line from time to time. Their latest machine is a side-shake milling separator with brushes under the sieves. This separator contains all the latest improvements, including many valuable new features that are peculiar to itself. The company will be pleased to answer all inquiries.

MERCHANTS' ELEVATOR, MINNEAPOLIS.

The Merchants' Elevator at Minneapolis is well named, being operated, in fact, for the benefit of the grain merchants at that market who are more particularly interested in barley and in the development of a barley market there on lines calculated to insure the highest quality of that important cereal to buyers, like the maltsters and brewers making their own malt, to whom quality is a prime essential. H. D. McCord, who is at the head, as president, of the Merchants' Elevator Co., was for many years connected with the T. M. McCord Co., commission merchants of Minneapolis and Duluth, and having been directly engaged with the details of the cash grain receiving and shipping business at Minneapolis, he has during the past eight or ten years made a specialty of barley, buying it on commission for some of the largest maltsters and barley dealers in the trade. During most of those years Minneapolis was a wheat market.

and treasurer; M. Rothschild, of D. Rothschild Grain Co., Davenport, Iowa, vice-president; while A. H. McIntyre, of McIntyre-Freric Co., Minneapolis, is secretary.

The elevator has two tracks, each some 2,000 feet long, one lying on each side of the elevator and being connected with the main tracks at each end. This arrangement gives it trackage of 90 cars, the loads being set in above the elevator, while the empties are taken out from the lower end. The working house is 42x56 and 115 feet high, with storage capacity of 90,000 bushels. It has a 50-foot 100-ton Howe Track Scale (with recording beam) on each side, the scales and foundations being composed entirely of steel and concrete. They are located inside of extremely high and light car sheds, so that the grain is unloaded always by daylight, which is impossible in the old style of elevators.

The working floor is 20 feet high in the clear and contains two No. 10 Invincible Separators and two Invincible Double Needle Machines. The

above by belt conveyor placed in a steel and tile gallery and underneath the tanks by belt conveyor running in a concrete tunnel.

The elevator was designed and erected by L. O. Hickok & Son of Minneapolis.

One feature of the plant is its operation by electricity, and the fact that all spouting, motors and machines, no matter where located, is controlled perfectly from the working floor, thus entirely doing away with the necessity of men anywhere above the working floor. The total storage capacity of the new house is 225,000 bushels.

ILLINOIS CORN EXPOSITION.

The Illinois Corn Exposition for 1908, held at Springfield, Ill., opened on Monday morning at 10 a. m., November 23, and lasted throughout the week. It was held in the Springfield Arsenal, and was attended by large crowds daily who exhibited the greatest interest and expressed their admiration of the corn booths, the decorations and the various exhibits made by merchants of Springfield and exhibitors from all parts of the state.

Ninety counties of the 102 in the state were represented in the Exposition either by individuals or county exhibits, and nearly one thousand exhibits were entered in the class competing for prizes of the best ten ears of yellow and best ten ears of white Dent corn grown by man or boy in each county in the state. These exhibits were displayed in the center booths of the main floor of the arsenal and attracted wide interest from everyone. The country and school exhibits were in the main tent. They were all splendid exhibitions of what Illinois has done to raise the standard of quality of King Corn, and many exhibits like that of Sangamon County and McLean County were deserving of especial mention.

The formal opening of the Exposition took place on Monday afternoon, November 23, at the Arsenal. Colonel Charles F. Mills presided, as chairman, and an address of welcome was made by Hon. Roy R. Reece, mayor of Springfield, who was followed by the opening address by Hon. Charles S. Deneen, governor of the state. The governor said:

Many years ago, James G. Blaine, speaking of the enormous value of the American corn crop, said: "Corn will yet be the spinal column of the nation's agriculture," and the passage of time has only served to verify and emphasize the correctness of this prophecy.

The overshadowing preponderance of the United States as a corn-producing country tends to obscure the fact that this crop is grown in almost every part of the world and forms one of the principal food resources of some part of each of the great continents. In northern China a large population depends principally upon the corn crop for its cereal food. The same may be said of the people of northern Italy and, to a certain extent, of the valleys of the lower Danube. Along the Nile Valley also its cultivation forms one of the most important agricultural industries. Extensive areas in South America and Australia are also devoted to its cultivation.

Notwithstanding the constant extension of the area devoted to its growth, however, this country is still preeminently the corn-producing country of the globe and steadily maintains an approximate output of 773 per cent of the world's total production.

The maintenance of first position in this industry by the United States is attributable largely to the greater variety of uses which the superior ingenuity of the citizens of this country has found for corn. In the Paris Exposition of 1900, there was exhibited in the American section a museum case containing 108 separate commercial products manufactured from corn. Some of these, of course, were very closely related, but there were at least 100 entirely distinct articles of commerce shown in the exhibit. Experiments constantly maintained with a view to finding new uses to which corn may be devoted are as constantly increasing this variety. Moreover, the primary use of corn as food is growing by leaps and bounds, not only by reason of an extending market but by reason of the new and superior methods of pre-



NEW MERCHANTS' ELEVATOR, MINNEAPOLIS, MINN.

rather than a barley market, but within a very few years its barley receipts have been rapidly increasing from year to year. Nevertheless, wheat being still the important cereal of the market, both by reason of the quantity received and the extent of the milling industry, its terminal elevators handled more wheat than anything else. As a result it was practically impossible to transfer barley through the elevators of the market into cars for Eastern or Southern shipment without the barley coming out more or less burdened with wheat. Realizing that this was the principal, and, in fact, a fatal objection to be urged to Minneapolis barley, and believing in the future of Minneapolis as a great barley center, and desiring also to protect the steadily increasing barley trade of the market, Mr. McCord secured probably the most desirable elevator site in the Northwest, located on three principal incoming roads and reached by all other grain-carrying roads at a minimum switching charge, and built this elevator for the sole purpose of handling barley and oats, organizing the "Merchants' Elevator Co." for that purpose. The company does not deal in grain at all, but simply operates the elevator exclusively for its stockholders, all barley or oat dealers. H. D. McCord, of T. M. McCord Co., Minneapolis, is president

house is operated by electricity, controlled by seven Fairbanks-Morse induction motors from 15 to 40 horsepower each, so that the different legs and machines can be used separately or all together as desired. It has two receiving legs, each having an elevating capacity of 8,000 bushels per hour. Grain, as unloaded from cars, can be at once started toward the different cleaners, needle machines, etc., and turned out needle and thoroughly cleaned at the rate of 2,000 bushels per hour and straight into cars on track on the other side of the elevator for shipment or thrown onto belt conveyor and sent to concrete tanks for storage, as desired.

There are direct loading spouts on each side of the elevator, also cross spouts, so that grain taken in on one side of the house can, if desired, be spouted to the loader on the other side and dropped 110 feet into a car without seeing the inside of a bin. The working house is also fully equipped with all labor-saving and safety devices, Cyclone Dust Collectors, Humphrey Man-lift, watchman and fire-alarm systems, etc.

In connection with the working house is a group of six reinforced concrete, fireproof, hopper-bottomed tanks, with two inner spaces, or bins, giving 135,000 bushels fireproof storage capacity and connected with the working house

paring it as a marketable product. The canning of corn for food purposes has now become an important industry in many of our states, notably in New York, Maine, Illinois, Iowa and Ohio. This method of preparing it for use as food has enormously enlarged its market, a market of almost unlimited extension. Undoubtedly the effect upon corn production of this extension of markets will be similar and not inferior to the effect produced upon the meat and fruit industries by the introduction of the refrigerator car.

All things considered, therefore, it is manifest that the future of corn production is bright and that the preeminent position held by it among the industries of the country is assured for a long time to come. It is a mere truism to say that our country possesses no more valuable asset than is found in the fertility of its soils, and among these the rich soils of the corn area stand foremost. No part of the country surpasses Illinois in the richness of the alluvial soil found in our corn belt. To our own state, which is the lowest in elevation in the great central basin, was carried, in the formative period of the continent, the rich soil deposits which were washed down the great river valleys to spread themselves over the vast alluvial area of which Illinois forms the central portion.

Upon this soil, naturally of all but inexhaustible

of corn, corn score card, studies of the different parts of a kernel of corn, commercial products of corn, suggestions for corn experiments.

Nothing could be of greater importance to agriculture and to the many branches of manufacturing industry dependent upon it than the promotion of interest in the serious study of this important subject, and the state is to be congratulated upon the holding of this great corn exposition. It will, I hope, prove an attraction to thousands of our citizens engaged in other pursuits besides those of agriculture. The attainment of the best results in corn culture depends upon so many factors that it can only be reached through extensive co-operation and the awakening of a general public interest in the matter. I know of nothing which could better secure this co-operation and interest than the comprehensive object lesson here afforded of the history of corn and the methods which have resulted in such magnificent improvement and development. To its promoters are due, I am sure, the thanks of the community.

Hon. D. W. Smith, president of the organization, followed the governor with an address on the "Illinois Corn Exposition."

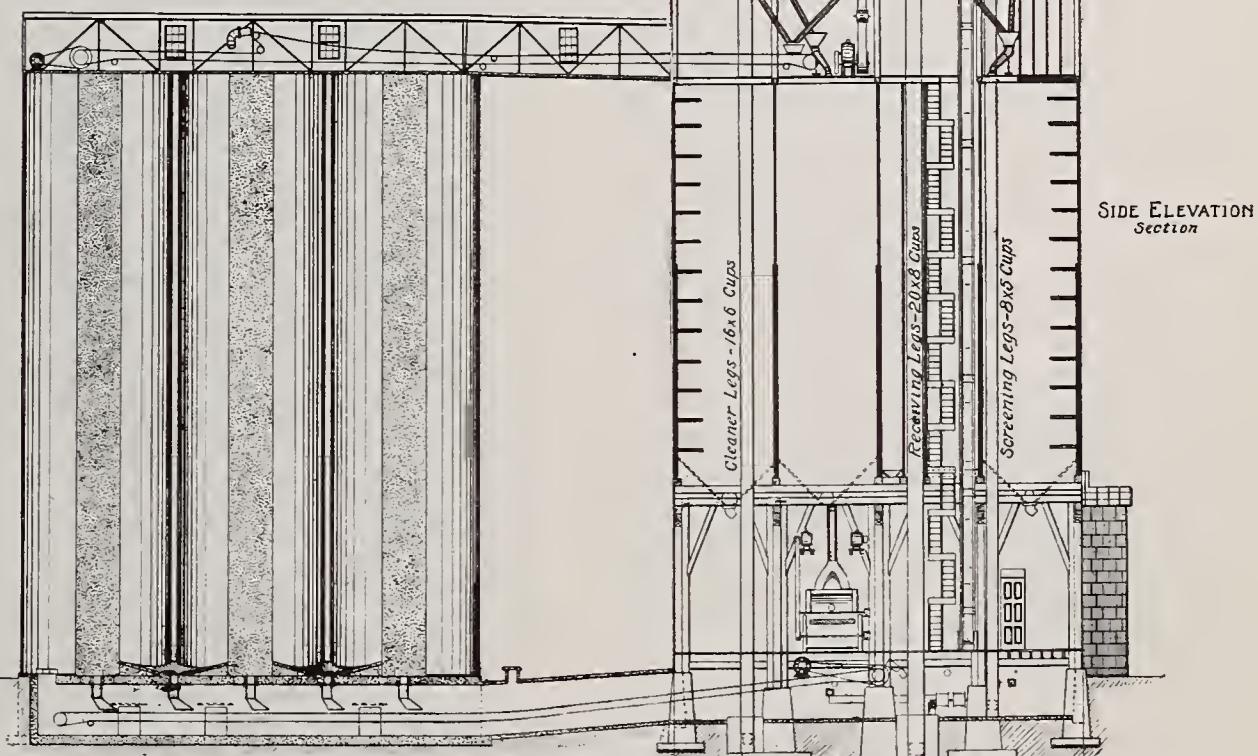
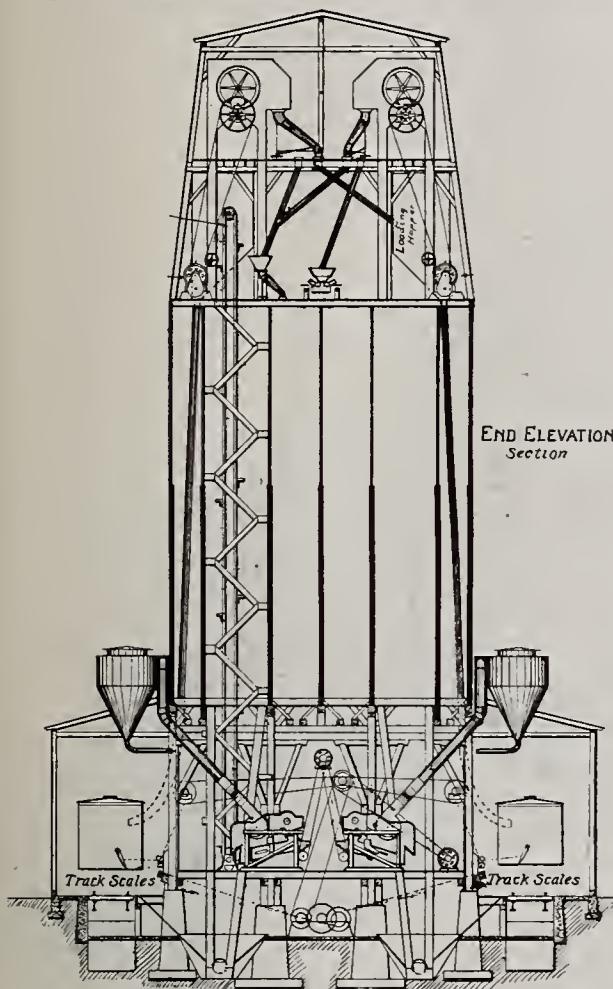
The educational sessions, which were a feature

"Grain Dealers' Day" was set by E. M. Wayne, president of the Illinois Grain Dealers' Association, for November 27 and 28, and quite a number of grain men from various points in the state attended the exposition on those days.

The feature of the educational session on Friday afternoon was an address by Colonel Clark E. Carr, late United States Minister to Denmark, who told of the efforts made in establishing corn as an article of food in foreign countries. Among many other things, Mr. Carr said:

"When we reflect that Indian corn occupies the leading position in the agriculture of the United States, and that our country has practically a monopoly of its production as against all other countries of the earth, that in foreign markets we do not have to compete in corn with other countries, as is the case with wheat and other cereals, it is remarkable that greater effort has not been made to extend the uses and demand for it."

Hon. A. P. Grout of Winchester, a notable friend of improved corn culture and agricultural



SECTIONAL PLANS OF THE NEW MERCHANTS' ELEVATOR, MINNEAPOLIS, MINN.

fertility, the raising of corn can, with proper care and judicious crop rotation, be successfully continued almost indefinitely; for corn, unlike wheat and other smaller grains, is not an exclusive crop. The maintenance of satisfactory prices which is certain to result from the steady diversification of uses for corn, moreover, makes it a profitable crop to raise even upon such high-priced lands as those of central Illinois. The prospect seems to be that new uses and the resulting extension of its market will tend to maintain, perhaps increase, rather than diminish, its profitability to the grower.

The important position held by corn among Illinois products has been recognized by the state. The agricultural experiment station of the state university, which has given so much attention to agricultural subjects generally, has recognized the preeminence of corn production and is giving special consideration to the dissemination of information regarding the best methods for its cultivation. The experiment station is now co-operating with Illinois Farmers' Institute in this work and is offering premiums to Illinois farmers for the production of the best grades of corn. In its course of instruction at the state university is included instruction in judging the qualities of corn, the completion of the course in this branch entitling the student to a certificate as an expert corn judge.

The thoroughness of this instruction may be judged from the comprehensiveness of the course of study. It embraces:

Studies of the corn plant, studies of an ear

of the Exposition, were begun at 1:30 o'clock on Tuesday afternoon. These sessions were held in the front room on the second floor of the arsenal in the southeast corner of the building. Col. Charles F. Mills presided, and two excellent addresses were given, one by Prof. L. Davenport, dean of the College of Agriculture at Urbana, who talked of "Corn in Illinois," and the other by Cyril G. Hopkins, professor in agronomy at the Illinois College of Agriculture, who spoke on "Corn Soils of Illinois."

On Wednesday afternoon there was an address on "Corn for Seed" by Eugene D. Funk, president of the National Corn Growers' Association; an address on "The Corn Farmer" by C. A. Rowe, president of the Illinois Corn Growers' Association, and an address by Prof. F. G. Blair, superintendent of Public Instruction, on "Corn in the Schools."

On Thursday afternoon S. W. Strong, secretary of the Illinois Grain Dealers' Association, gave an address on "Marketing Corn." We publish this address on another page of this issue. Mr. Strong's address was followed by a paper by Dr. T. B. Wagner, director of the Corn Products Company, Chicago, on the subject, "The Great American Industry of Corn Production."

education, delivered an address on "Corn Culture." He discussed at some length soil conditions and the proper preparation of the same before the period of planting, and methods of cultivation after the crop had once been started. The speaker advanced some most excellent ideas, gleaned from his own experience, which, when they are placed in the hands of the farmers of Illinois in printed form, will prove a source of valuable information. The speaker declared that he knew of "no investments that will equal that of good cultivation, especially when applied to the corn crop. One acre well tilled is worth several acres poorly tilled. One acre properly or scientifically cultivated can be made the equal of several acres carelessly cultivated, and it is no longer a question of how many acres can be grown, but how well they can be grown."

"There is a vast field for improvement in corn culture in Illinois. There is an almost unlimited opportunity for increasing the value of the crop, and it is only a question of who and how many will grasp the situation and thoroughly familiarize themselves with the minutest details relating to the growth and requirements of the crop, and then give it the culture which is demanded for the best results."

In addition to the corn exhibits there was a band of Indians from Canada, who gave interesting entertainments hourly, showing the various dances performed by the tribe and many of the tribal customs, such as the rendering of the tribal songs and smoking the pipe of peace.

There were also exhibits of game birds and waterfowl from the state game farm at Auburn. These were placed under the personal direction of Dr. John A. Wheeler, state game commissioner. There were pheasants, grouse, ducks and prairie chickens of all varieties.

One quite important feature of the Exposition was the sale of seed corn on exhibition. During the first day of these sales, Wednesday, conducted by Col. Jas. H. Maxcy as auctioneer, over \$1,000 were bid. The ten ears of yellow corn exhibited by J. W. Workman of Maxwell Township, Sangamon County, which won the premier championship, netting its exhibitor in the neighborhood of \$805 in cash prizes and about \$1,500 in merchandise prizes, were the first to be sold, and after spirited bidding indulged in by Mr. Workman, the exhibitor, and S. J. Craig of Chicago, representing the Swan Creek Phosphate Company, were finally sold to Mr. Workman for the sum of \$310, an average price of \$31 an ear. This corn is entered by Mr. Workman at the National Corn Exposition at Omaha, Neb., now in progress.

The premier champion ten ears in the boys' class were sold to A. D. Mackie, manager of Springfield Evening News, for the sum of \$200. In class A, section No. 165, second prize, George A. Dunseith's breed corn was sold to S. J. Craig of Chicago for \$101. The third prize in class A, exhibited by Mr. Workman, was bought by that gentleman for \$23. The fourth prize in the same class, exhibited by Mr. Workman, was also bought by the exhibitor for \$21. The balance of the corn sold in the class A section varied all the way from \$10 down to \$1.

On the following day the auction of prize corn in class K, ladies and girls, netted about \$500, the highest award, best ten ears, yellow, being sold to Smith & Company, of Springfield, as was also the second prize in yellow, which brought \$40, and the same firm bought the first prize winner in white, paying therefor \$50, and the second was purchased by W. E. Johnson of Athens for \$40. The remainder of the corn sold ranged downward in price.

On Friday the sales netted one \$250, the corn coming from the northern and southern divisions of the state.

The corn show was conducted under the general management of Nicholas Roberts of Springfield, and to his genius and personal exertions was due very largely the complete success of the Exposition.

The commissioners appointed by Governor Deneen to represent the Illinois Grain Dealers' Association at the Exposition passed the following resolution, and reported the same to his Excellency:

Whereas, Charles S. Deneen, governor of the state of Illinois, did, by proclamation, appoint, to represent the Illinois Grain Dealers' Association, the undersigned, to attend the Illinois Corn Exposition; and

Whereas, Having duly visited said Corn Exposition and carefully examined the exhibits therein, beg to make the following report:

Resolved, That we heartily commend the Exposition as an artistic exhibition of the products of corn; and, further, we desire to laud the meritorious display of corn raised in Illinois, whose quality we believe cannot be excelled. We believe that the educational advantages afforded by the Exposition will compensate, to the people, for the cost. Representing the Grain Dealers of Illinois, we feel justified in saying that such exhibitions work manifestly to the betterment of corn, and develop its quality and increase the yield per acre in the state; and, therefore, we beg to most thoroughly commend the exposition, and also those public-spirited citizens who carried it through to such a successful conclusion.

ADDITIONS TO THE CARGILL ELEVATOR.

Minneapolis continues to add to her elevator capacity in the face of "Jim" Hill's prophecy of the decadence of wheat growing on the old lands of this country. But Minneapolis is reaching out farther into the country west of her, into Montana and Idaho, whose grain fields are beginning to yield a surplus which must find a market outside those states; and where better can her farmers send this surplus than to the East, where there is a brisk competition to get the oats and barley whose splendid quality has attracted attention ever since they began to appear in the eastern markets. The increase of the barley crop, too, in the Northwest has, as we have seen in the case of the Merchants' Elevator, called for special facilities for handling that cereal.

Now we have to note the enlargement of the Cargill Elevator Company's Elevator "T" by the construction of an annex of 500,000 bushels' capacity, shown in the accompanying picture.

This fireproof storage house, together with a concrete seed warehouse, 30 ft. by 150 ft. by 10 ft. high, located not far from Elevator "T," were both designed and built by the Barnett & Record Co. of Minneapolis.

NATIONALIZING ELEVATORS.

The North Dakota Grain Commission, consisting of A. H. Thompson, M. O. Hall and E. D. Washburn, who last fall visited Duluth and Superior to investigate the methods and appliances for handling grain at those terminals, have prepared a report on the question they were delegated to investigate, to wit, the advisability of North Dakota going into the grain business. The committee's findings will not, however, be made public until after the report has passed the hands of the governor.

At Regina, Sask., on November 26, the premiers of the three provinces of Manitoba, Saskatchewan and Alberta met the representatives of the Grain



REINFORCED CONCRETE TANKS ATTACHED TO THE CARGILL ELEVATOR CO.'S ELEVATOR "T."

This annex is built of reinforced concrete, and consists of twenty-four tanks, each 20 ft. 4 in. in diameter and 90 feet high, grouped in a cluster design, eight tanks long by three tanks wide, thus forming fourteen interspace bins.

This structure is of reinforced concrete from foundation to top, a small quantity of structural steel being used in the cupola frame and in the connecting bridge between the cupola of working house and the tanks.

Two 30-inch belt conveyors run through this bridge and are used to fill the tanks, while two 30-inch belts below take the grain from the annex to the working house. Rope transmission is used for driving all of these conveyors, the power being taken from shafting already in place in Elevator "T."

All the bins are hopped and gravity self-cleaning, thus making, with the large conveyor capacity, a rapid handling addition to the former working house.

Growers' Association for the purpose of discussing the question of the nationalizing of the grain elevators, station and terminal, of those provinces. The conference was behind closed and doubly locked, barred and hermetically sealed doors. Certain branches of the Grain Growers' Association have declared in favor of the government taking possession of the elevators at the terminals, and are circulating a petition to that effect.

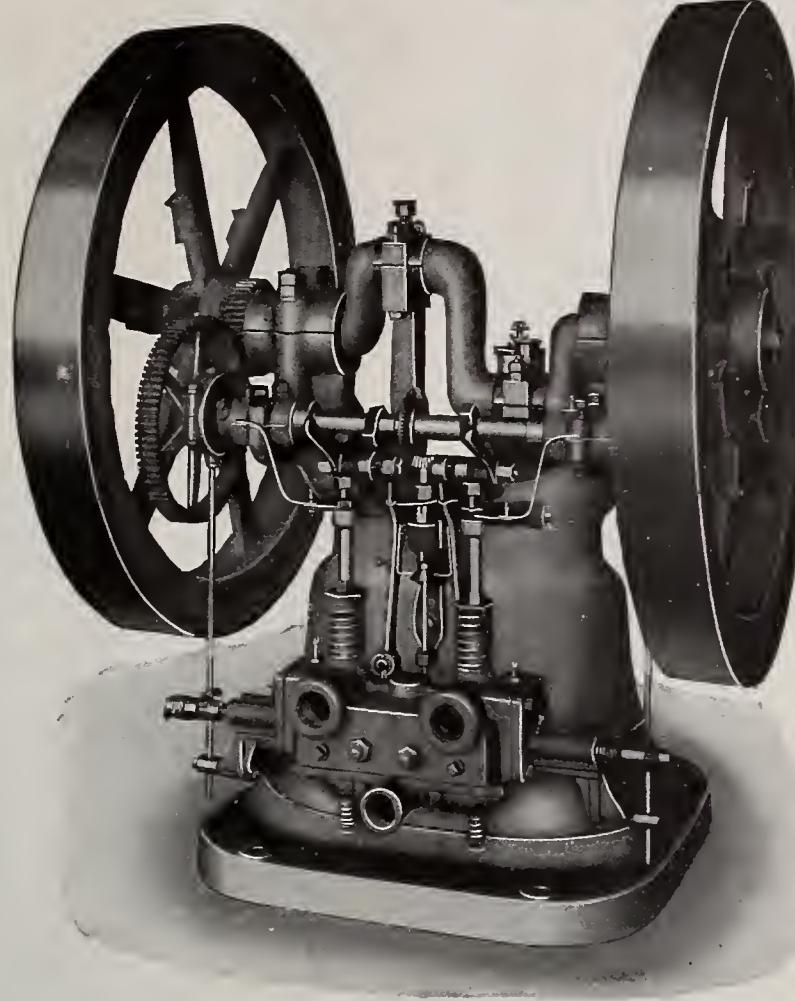
The Texas corn crop is estimated at 201,848,000 bushels, an increase of 46,000,000 bushels over 1907. Another noteworthy feature of this year's crop is that the yield per acre was greater than ever before, the average for the state being 25.7 bushels per acre, as against 21 bushels last year and a ten years' average of 19.6. Texas now ranks fifth in corn, having in recent years passed such states as Kansas, Ohio, Indiana and Kentucky.

THE "MASTER WORKMAN" GASOLINE ENGINE.

The high efficiency of gas and gasoline engines as motive power for grain elevators is no longer questioned. Elevator men of to-day pretty generally agree that, for their purpose, gas and gasoline engines furnish the best motive power. Granted this, the engine which occupies a small space, which is of simple and easily understand-

question of establishing uniform conditions for the sale of cereals, and the Grain Merchants' Union has addressed a memorandum to the Millers' Association setting forth the advantages of this course of action. It is suggested, with a view to arriving at a solution of the question, that efforts should be made to get together a thoroughly representative conference. The movement has the strong support of the Budapest grain merchants, who are desirous of introducing uniform condi-

Animal Industry at Washington, by whose officers he was directed to have the car inspected and sealed by an officer of the Agricultural Department before it could be forwarded.



THE "MASTER WORKMAN."

able construction, and which is adapted to a variety of uses, is certainly worthy of special consideration.

We reproduce herewith a cut of the latest model of an engine which embraces all of these points, the "Master Workman" double cylinder engine, manufactured by the Temple Pump Co., Meagher and Fifteenth Streets, Chicago, Ill. Gasoline, alcohol, distillate, natural or artificial gas may be used with the "Master Workman," and its construction is such that, with a vaporizer, it may be adapted to kerosene consumption. One point that will be appreciated by all users of gasoline engines is the fact that the mechanism of this engine is in full view, making it easy to understand and manage. As may be seen from the illustration, the "Master Workman" occupies a remarkably small space. In addition to this the freedom of the "Master Workman" from vibrations and its greater durability on that account make it highly desirable for elevator use. It is made in sizes ranging from 5 to 45 horsepower.

In addition to its use in elevator work the "Master Workman" has been adapted to an almost infinite variety of uses. The second cut shows one of them, the "Master Workman" mounted as a traction engine. In this connection it has been found easily capable of driving a wagon or farm machine up steep grades and over the roughest ground.

The Temple Pump Co., which manufactures this engine, is now in its fifty-fifth year, and the "Master Workman" has long since passed the experimental stage. Anyone interested in a gas or gasoline engine will be sent a catalog on request to the manufacturers, giving further particulars.

Hungary is busying itself with the important

tions for the purchase of wheat similar to those in vogue in all international markets.

HAY AND FEED QUARANTINED.

In the work of suppressing the foot and mouth disease in the East, New York and Pennsylvania



THE "MASTER WORKMAN" MOUNTED AS A TRACTION ENGINE.

more particularly, the authorities of Pennsylvania have gone so far as to put hay and cattle feed under the ban of the quarantine erected against infected districts.

At Nashville, Pa., the railroad refused to accept a shipment of hay consigned to Baltimore, and on referring the matter to the local veterinarian, he was referred from Harrisburg to the Bureau of

LIGHTNING LOSSES.

The following memorandum of lightning losses sustained by the Millers' National Insurance Company for the year 1908, furnished by M. A. Reynolds, secretary, will be worth examination:

Total number of losses covering the period from March 1 to September 19 was.... 29
Insurance involved..... \$108,142.00
Loss sustained..... 15,363.41

DIVIDED INTO CLASSES BY STATES.

State.	No.	At Risk.	Loss.
Missouri	1	\$ 2,500	\$ 8.49
Kansas	1	2,200	10.00
Indiana	1	5,000	514.45
Oklahoma	2	5,500	21.13
Illinois	3	9,250	126.30
South Dakota	3	8,475	24.76
North Dakota	3	8,250	7,381.92
Minnesota	8	11,367	1,889.21
Total	22	\$52,542	\$9,976.26

FLOUR MILLS.

State.	No.	At Risk.	Loss.
Kansas	1	\$20,000	\$19.55
Illinois	1	9,100	6.00
Wisconsin	1	4,500	49.05
Total	3	\$33,600	\$74.60

ALL OTHER PROPERTY.

State.	No.	Risk.	At Risk.	Loss.
Michigan	1	Foundry	\$10,000	\$ 3.85
Michigan	1	Tannery	2,500	7.27
Ohio	1	Rubber factory	4,500	4,468.09
Ohio	1	Lumber yard	5,000	833.34
Total	4		\$22,000	\$5,302.55

Of the total number of losses, elevators furnish 76 per cent, flour mills 10 per cent, and all other property 14 per cent. Of losses sustained, elevators furnished 65 per cent, flour mills 1/2 per cent, and all other property 34 1/2 per cent.

Of all the elevator losses, 50 per cent occurred in the states of North Dakota and Minnesota. And these two states gave 38 per cent of all the losses that occurred.

Of the money paid for elevator losses, 93 per cent went to these two states, and they took 60 per cent of all the money paid for lightning claims.

There were but five total losses during the year, three of them being on elevators in North Dakota, one on elevator in Minnesota and one on rubber factory in Ohio, which was 17 per cent of all the losses and called for 89 per cent of all the money paid lightning claims.

Among the famous "prize cattle" shown at the late International Live Stock Exposition at Chicago, was Prime Lad XVI, "King of Herefords," owned by Warren T. McCray of Kent-

land, Ind., former president of the Grain Dealers' National Association. Prime Lad XVI is directly descended from two grand champions, his sire being Prime Lad, grand champion at the World's Fair in 1903, and his dam being the world-famed Lorna Doone. The "king" is three years old and has made clean sweeps in competitions.

WHEAT DAMAGE.

The North Dakota Experiment Station, in conjunction with the U. S. Department of Agriculture, has entered upon a series of experiments, or an investigation, of the causes of wheat deterioration and the effect upon the flour-making properties of wheat of frost, bin-burn, etc. The investigation will be made with various kinds of wheat, such as fife, blue stem, velvet chaff, durum and other varieties, to find out all that can be learned of them in regard to their properties and their bread-making qualities. While a large portion of the samples tested will come from North Dakota, a large number will also be tested from other states.

The fact that the government chose the North Dakota Agricultural College as the place for carrying on this co-operative work is a source of much gratification to the faculty of the College, which was chosen because of the fine equipment

Howard gets out an impartial one, working entirely for his own report, the Chicago Daily Trade Bulletin, the only official organ of all the Chicago grain trade. His reports are probably the best. He does not attempt any monthly.—C. A. King & Co., Toledo.

THE SCHMITZ SCALE TICKET PASSER.

Every grain man will recognize the convenience of the Schmitz Scale Ticket Passer by a glance at the accompanying illustrations. To deliver the grain ticket to the man in the wagon it is only necessary for the weighman in the office to place the ticket on the receiving rod, pull the chain which attaches to the lever and, presto, the farmer has his ticket and has made way for the next man in line with a wagon of grain.

There are a number of conveniences resulting

American hard winter No. 2 wheat. It appears that certified cargoes from northern ports show admixtures of 50, 60, and even 80 per cent of red winter wheat, which is very much cheaper than by the description it purports to be. This action has had its effect in Washington, says a German writer, who adds that the United States Department of Agriculture has sent a commissioner to Berlin to enquire into the general situation of American wheat in Europe. It is, therefore, suggested that European grain traders should send to the American Consul-General at Berlin any material they desire to put forward in support of their grievances.

GRAIN AND THE BUSINESS REVIVAL.

It is now a little over ten years since the "Leiter wheat deal" of 1897-98 marked the at least visible beginning of the revival of business after the panic of 1893. We all remember how, in 1898, upon this "Second Joseph's" modest head



PLACING TICKET IN THE RECEIVING ROD.



MECHANISM OF THE SCHMITZ SCALE TICKET PASSER.



of the institution for work of this kind. The experimental flour mill, which has been in operation for almost a year, is one of the largest of its kind in the world, while the bakery also is very complete and is a very important equipment in the work to be done by the two sets of experimenters.

Agents will be put into the field to collect samples of grain, as it is here that one great difficulty in the work will be encountered. It is hard to secure representative samples of wheat, as in the case of damaged grain the injury is seldom uniform, and while one part of a field may be badly hurt, another section may produce an undamaged crop. Then, too, the different varieties are not always of a pure strain, while some farmers plant a pure seed.

Snow is a private crop expert. Some years ago he was in the crop bureau of the Government. He now issues private reports, working for Bartlett, Patten & Co. and the Orange Judd Farmer. He does not get as many crop replies as the official state and Government bureaus, but his reports are generally regarded as fair and as near the Government as any. B. Frank

from the installation of the passer. In the first place it saves the time of the elevator man in running out every few minutes to the wagons. It saves doctor bills by preventing colds caused by frequent changes of temperature from the warm office to the outside weather in winter. It saves the coal bills by keeping the winter blasts out of the office and, lastly, its use shows the grain man to be up-to-date and deserving of the farmers' patronage.

The appliance is designed on the lever and weight principle and is simplicity itself, and it requires but one movement of the hand of the operator to place the ticket in position where the driver can reach it from his seat in the wagon. An examination of the pictures will answer every question concerning the mechanism.

The ticket passer is now in successful operation in a number of elevators and may be ordered of the manufacturer, J. A. Schmitz, 2811 N. Hermitage Avenue, Chicago, Ill.

The Grain Traders' Union of the Hamburg Bourse have issued a circular to the large mills and wheat importers of Germany, calling attention to the numerous complaints regarding cargoes of

enthusiastic Kansas farmers placed the crown of laurel as the author of that "blessed time and circumstance," and how, too, when he "went broke" and Papa Leiter had to sacrifice some choice pieces of State Street real estate and to call in "Phil" Armour, then alive and a "friend of the family," to get rid decently of the corpse, and how all the satisfaction Papa could find in the burial was that he could claim for the family the proud title of "Makers of Prosperity."

So we are again, as in 1898, confronted with the conundrum, Was it Joseph or the grain itself that created the "boom" that continued its reverberations until that fatal October day of 1907, when the cavortings of one Morse, now "doing his dumdest" to escape Sing Sing, capped the climax of "high finance" and precipitated the "deluge"? Now, it so happened that the 1907 crops in Europe were short, and those in America were abundant, and in the history of the events subsequent to the harvest of 1897 we are given a very lucid explanation and example of the way in which apparently, at least, prosperity of the farmer exerts its influence on the legitimate recovery of normal business conditions, and upon that record many business men, in the East par-

ticularly, now believe our active grain export trade in the crop of 1908, as a result of the shortage in Europe's crops, "will place this country in control of the foreign exchanges and of European capital, and introduce a boom on the financial markets resembling the memorable episodes of the kind after 1879 and 1897.

"But one needs to go a little slowly in framing this second prediction," says the New York Evening Post. "It is entirely true that in our past industrial history trade revival throughout the United States has been materially helped, and sometimes actually caused, by the large export business in wheat, corn and hog products. The revival in 1880 and 1881, when speculation in securities and in everything ran wild, was due to short crops abroad, good crops here, and large exports from America. In 1897 Europe again had short crops of wheat, and its purchase of the American cereals at the high prices ruling in the domestic markets greatly assisted in stimulating trade with the agricultural regions, enabled farmers to see a new light and marked the turning point in their individual fortunes. They began to pay off their mortgages at once and to achieve the financial independence of the West.

"For the cereal year ending June 30, 1898, exports of wheat and flour from all United States ports were 217,303,000 bushels; of corn, 208,745,000

a bushel was considered a high figure and 50 cents an extravagant one. Nowadays farmers west of the Missouri River want 50 to 60 cents, and in Illinois they are selling very little corn at under 57—most of them, in fact, holding for 60, remembering that last year, by holding their corn until the summer, they secured 65 to 75. These prices are remarkable when it is considered that less than twenty years ago corn sold at 15 to 20 cents in Nebraska and was burned for fuel.

"In many respects these are signs of high encouragement. But they also mean that there is little chance of the United States ever raising enough wheat in the future to make it such a figure in the export trade as it has been in the past. The export wheat from North America will have to come from the Canadian Northwest, and from that part of the American Northwest which has not been fully developed. It is not believed by the best-informed men in the grain trade that wheat can be profitably raised for export on irrigated lands of the West and compete with Argentina and Russia."

ADOPT THE UNIFORM GRADES.

The grain men of the Cincinnati Chamber of Commerce on November 12 adopted the grain inspection rules laid down by the National Grain



FARMER RECEIVING HIS TICKET.

bushels. The latter were the largest exports of corn on record. In 1901 exports of wheat were 215,990,000 bushels and were followed in 1902 by the record exports of 234,772,000. It is not possible for the United States to again reach the high mark in exports of 1902. Population and consumption have gradually pressed upon production and each year finds it more and more a domestic rather than a foreign, situation in regard to the marketing of this country's crops.

"For the four completed months of the present crop year exports slightly exceed 60,000,000 bushels, and the most conservative statistician in the trade figures that there are only 140,000,000 bushels remaining available for export, consumption and carrying over to July, 1909. Our exports from November 1, 1907, to July 1, 1908, were 111,000,000 bushels. In case exports in the next eight months were to equal that record the United States would be left with reserves of only 39,000,000 bushels of wheat, which would place it in practically the same position as at the opening of this crop year, with reserves dangerously low.

"We have seen our lowest prices for grains in this country in the past years and the tendency is toward a higher level of values. Ten years ago \$1 wheat seemed high, but a price of 90 cents is now regarded as low and \$1 as not too high for the present situation. Corn values are also working higher. Twelve years ago 35 cents

Dealers' Association. The rules are very similar to those of the Chamber of Commerce and but very few changes will need be made. The members of the Chamber of Commerce are opposed to the Government inspection on the ground that it will bring politics into the inspection of grain, cause the appointment of men not familiar with the business and create chaos in general.

A local paper at Dayton, O., says that local grain dealers favor the movement to secure uniform grading rules.

The Ohio Millers' State Association, at a meeting at Toledo on November 12, after listening to addresses on the subject by John F. Courcier, secretary of the Grain Dealers' National Association, and Inspector E. H. Culver, Toledo, on motion of C. B. Jenkins, approved the action of the Grain Dealers' National Association in its adoption of uniform grading rules.

At the Arizona Experiment Station in 1906 25,530 pounds of new-mown hay, cut on five different dates from April 19 to November 9, remained in the stack until February 11, 1907, when the loss due to shrinkage amounted to 2,825 pounds, or 11 per cent. The following season the third crop of hay, amounting to 23 tons, 1,796 pounds, was stacked about July 20. By December 14 a shrinkage of 5 tons, 971 pounds, or 23 per cent, had taken place.

INTERNATIONAL INSTITUTE OF AGRICULTURE.

The International Institute of Agriculture was opened at Rome on November 16 with representatives present from forty-six different nations. The United States was represented by Ambassador Griscom, David Lubin, Dr. C. C. Clark, W. F. Hill, G. K. Holmes and William Stuart. After the speech by the president, Senator Faiana, Mr Lubin outlined the constitution of the institute substantially as follows:

The aim of the International Institute of Agriculture is the creation of an international and, above all, an authoritative bureau of information as to all statistics which affect the supply and demand of raw material. It is admitted that some countries are already provided with systems for obtaining such statistics, often of a very elaborate character. But it is contended that no separate national system can attain either the thoroughness or the authority of a great international center of information supplied officially by all the great producing nations. The violent fluctuations to which the cost of raw material—whether grain, cotton or meat—is still subject bears witness to this truth. No single nation, or combination of two or three nations, can hope to acquire the same full information or impart it with the same authority as can a combination of all the nations in an international institute.

On the initiative of the King of Italy, to whom the scheme had been proposed by Mr. Lubin, an International Congress on Agriculture met in Rome in 1905. It was on June 7 of that year that the gathering, attended by delegates from almost every nation in the world, concluded its sittings and signed a final protocol. In this was embodied a complete scheme for the organization of an International Institute of Agriculture, for the exact definition of its objects and duties, for the provision of a permanent establishment with its seat in Rome, and for proportioning the cost of its maintenance among the nations who had promised their adherence to the scheme. Of the objects and duties to be undertaken by the institute and, indeed, constituted the chief aim of its promoters.

1. To collect, study and publish as promptly as possible statistical, technical or economic information concerning farming, both vegetable and animal products, the commerce in agricultural products and the prices prevailing in the various markets.

2. To communicate, as promptly as possible, all such information to the parties interested.

The trade in agricultural produce of all kinds has always been the most speculative of all kinds of commerce and trade, since it is based on more unknown quantities of supply and demand than any other business in the world. For the future all countries adhering to the institute will be pledged to organize for themselves a trustworthy system for collecting home statistics, which will be supplied continuously and rapidly (by telegraph) through their departments of agriculture to the central institute. In its turn the Institute will summarize this information and diffuse it in a simple form with a like rapidity, giving the condition and prospects of growing crops, the amounts of stock in hand and the quantities of produce in transit.

Since the close of the Congress of 1905 Italy has done her part toward an actual realization of the scheme. Professor Valenti drew up for the Ministry of Agriculture an elaborate plan for the collection of statistics, which has already been put to an apparently successful test. The building of the permanent seat for the Institute in the gardens of the Villa Borghese has also been completed, the funds having been provided by the King.

In the United States the Institute has had a warm support. Among its most enthusiastic advocates are the chief representatives of the cotton growing and allied industries. C. W. Macara, who is the president of the International Federation of Master Cotton Spinners' Associations, has calculated that speculators in cotton derive enormous

profits because of the ignorance which prevails as to supply and demand in that market. A few years ago the price of raw cotton was raised by manipulators of the market from 8 cents to 14 cents a pound. Of this increased price the producers got next to nothing, so that, estimating the ordinary value of the cotton crop of the whole world at about \$800,000,000, the huge sum of more than \$500,000,000 must have gone into the pockets of manipulators. Cereals and, indeed, all kinds of agricultural produce—whether it be corn, cotton, tobacco or live stock, meat or wool—are subject to the same conditions, and it is principally to combat this ignorance, we are told, that his majesty the King of Italy has called into being the International Institute of Agriculture.

COBLESS CORN.

Among the curiosities, or novelties, of the Illinois Corn Exposition at Springfield was the "Cobless Corn" exhibited by H. J. Sconce of the Fairview Farm, Sidell, Ill., a member of the Illinois Seed Corn Breeders' Association.

Two years ago Mr. Sconce purchased a quantity

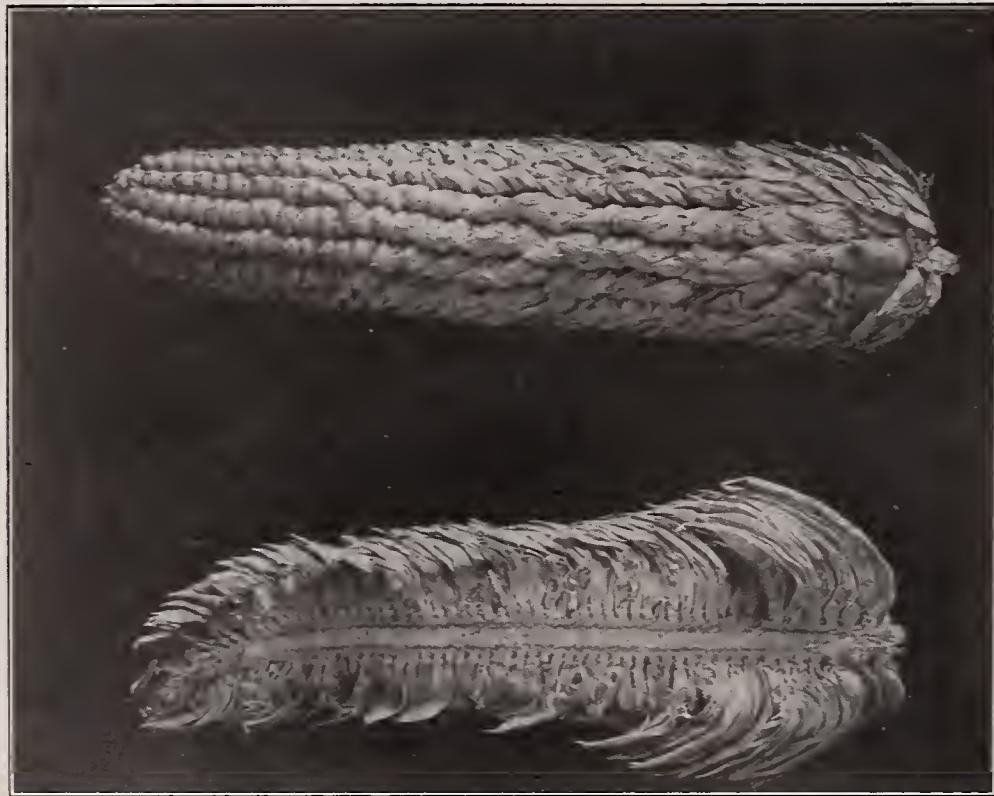
few of the oldest settlers, but in not in so highly a developed state as these ears represent.

"The supposition is that this corn is something like the old primitive corn which all of our pure breeds have originated from; for corn originally grew on the tassel, and each kernel was enclosed in an individual husk; but the ears were very small and inferior. From the photo the reader will notice what a perfect ear has been produced and the development that has been accomplished in the two years of breeding, showing that it is susceptible to breeding on scientific lines.

"The ear shown is 11 inches long, 8 inches in circumference, and weighs one pound. The kernels are encased each in an individual husk, with the whole ear covered by a husk the same as other corn.

"The cob is, as it will be seen, as small as possible to hold the ear together—merely a thin shell around the pith.

"This corn has some very interesting characteristics that the breeder does not care to disclose at the present time, as it is in the experimental stage, and which will be, when the de-



THE "COBLESS CORN" GROWN BY H. J. SCONCE.

of Illinois seed corn, and in the shipment was a freak ear, which, instead of the ordinary cob, had a core composed only of husk, the grains being neatly wrapped upon the soft foundation like peas in a pod, the cob and pith being a trifle larger than a lead pencil. Mr. Sconce was impressed with the novelty of the find and decided to plant all the kernels found on the freak ear, which he did last spring; and the ears shown at Springfield were from the product, and are practically true to the seed, and of about the normal size of a regular ear of corn. Whether another year the hybrid will prove to be a permanent variety remains to be seen. At present Mr. Sconce claims and predicts nothing, either as to the stability of the type or its commercial future. As a corn breeder he appreciates the opportunity that has been thrown in his way, but as a breeder, also, he is modest, slow to jump to conclusions and content to wait the course of nature to determine the character of the find he has made. His breeding of the seed is, however, being conducted on strictly scientific lines.

The photograph of this unique corn herewith given was kindly furnished by Mr. Sconce; and of the produce, this year's crop, Mr. Sconce, by request, has favored us with the following account. He says:

"This is the corn that has been creating no little interest all over the United States, as the 'cobless corn.' It is a freak, for this generation, although many years ago this corn was seen by a

development is completed, very interesting and beneficial to agriculturists in general."

There has been a great demand from all parts of the country for sample ears and kernels of this corn; but Mr. Sconce desires to say that he has no samples for distribution at all, as it is not yet ready to be sent out.

The Fairview Farm Seed Co., Sidell, Ill., have a number of very fine varieties of pure bred, high-yielding seed corn, and will be glad to send catalogue and answer all inquiries in regard to seed corn, and other questions pertaining to this interesting subject.

The steamer Wm. B. Kern recently took out of Duluth for Buffalo 319,000 bushels of wheat and 141,373 bushels of oats, making 460,373 bushels, which is far ahead of any other load. The steamer Le Grand S. De Graff took into Buffalo 422,000 bushels of wheat on December 7, 1907, the record cargo at that time. Both boats are owned at Buffalo and Tonawanda.

E. Ingle of Cape Town, South Africa, recently shipped two carloads of Kansas broom corn to Africa. Mr. Ingle has a broom factory at Cape Town and has been using Kansas broom corn for the last five years. His factory was the first in that territory and succeeded so well that others have been established. Very little broom corn is raised in Africa, however, and what they do have is of inferior quality.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

RETIRING FROM BUSINESS.

Editor American Elevator and Grain Trade:—As we have retired from the grain business, you may please discontinue our advertisement.

Among the pleasant memories and friendships formed during forty years in this business, few are more pleasant than our acquaintance with the "American Elevator and Grain Trade." We have many little kindnesses to thank you for personally and for the loyalty you have always shown this point as a grain market and for the good things you have said of Toledo so often.

We wish you good health, happiness and success.

Yours truly, **REYNOLDS BROS.**
Toledo, O.

UNIFORM GRADING.

Editor American Elevator and Grain Trade:—The matter of uniform grading of grain has for a long time been looked upon with favor by those interested in the grain trade at Peoria. I think I may say that the members of the Peoria Board of Trade with hardly an exception favor uniform grades of grain, such as recently adopted by the Grain Dealers' National Association. I do not mean to say that the description of the various grades as outlined by this Association is absolutely satisfactory to all concerned, although I have heard no specific criticism. The common opinion is that the National Association rules for grading are all right or can be made so by slight modifications here and there. The adoption of these grades is now before the directors of the Peoria Board of Trade, with a strong probability of their being adopted to take effect July 1, 1909.

Peoria, Ill.

HAY EMBARGO.

Editor American Elevator and Grain Trade:—There have been so many misstatements in regard to the embargo placed on hay on account of the "foot and mouth" disease in cattle, sheep and hogs, and as we are receiving daily numerous requests for information from our members in regard to the embargo, we thought best to give the trade the information we have.

Under date of December 4 the Bureau of Animal Industry at Washington wrote us as follows:

1. The regulations of the U. S. Department of Agriculture to prevent the spread of foot and mouth disease in cattle, sheep, other ruminants and swine absolutely prohibit the movement of these classes of live stock from each of the states of New York, Pennsylvania, Maryland or Michigan for any purpose whatsoever. * * *

5. The movement of hay, straw or similar fodder (including these materials used for packing bananas, crockery, glass, other merchandise, etc.) from each of the states of New York, Pennsylvania, Maryland and Michigan, is absolutely prohibited until disinfected under the supervision of and certified by an employe of the Bureau of Animal Industry, unless it is shown that these packing materials originated outside of the states mentioned or were used for packing purposes prior to October 10, 1908, in which cases Bureau certificates will be given for their movement from the state without disinfection.

It is therefore suggested that hay, straw and similar fodder now within the states mentioned and which is not intended for packing purposes should be held within the state where now located, pending the further investigation of the Department to determine definitely the localities in which foot and mouth disease exists; unless, however, it is desired to break the bales and place the loose hay, straw and similar fodder in tight compartments and fumigate with formaldehyde gas under government supervision, which must be done as a precautionary measure before these materials may be moved interstate at this time.

6. Federal regulations to prevent the spread of foot and mouth disease do not apply to the movement of live stock, skins or hoofs, dressed

carcasses or hay, straw and similar fodder, within the boundaries of a state, such movement being subject to the approval of the state authorities. If, however, in the course of transportation between two points within a state it is necessary for the movement to pass through any part of another state, it becomes an interstate movement and therefore subject to the Federal regulations.

The above we believe gives everyone a clear understanding of the embargo.

The final report of the Agricultural Department of the hay crop of the country for 1908 is as follows: Total production, 67,743,000 tons, as against 63,677,000 tons for 1907 and a ten years' average of 59,907,000, giving us this year the largest crop of hay ever produced in this country. The quality of the 1908 crop is given as 94.5, as against 90.5 last year and an average of 91 for the last five years.

Yours very truly,

P. E. GOODRICH, Sec'y.

Winchester, Ind., Dec. 11.

CORRECTION OF NEWS ITEM.

Editor American Elevator and Grain Trade:—Referring to the annexed clipping from the November number of your paper—

Fire of unknown origin completely destroyed the stock of the Overstreet Grain Co. at Little Rock, Ark., on October 26. The building was damaged to the extent of about \$1,000 and the stock within it was a total loss, placed at \$5,000, with \$3,000 insurance. The Overstreet Co. will continue their business in Little Rock at another site—

we have to say that same was in a measure correct. The facts are that the origin of the fire was unknown, but the stock was not a complete loss. The hay was completely destroyed, but there was some salvage to the grain. Our stock not including any furniture or fixtures was approximately \$5,500, with \$4,000 insurance. We retained our office at the building and continue our business from the old building by using our large warehouse on the Mo. Pac. tracks to draw and deliver from. Our building has been repaired and we are doing business as if we had not been visited by fire. Our loss will not reach \$1,000.

Yours truly,

WM. E. OVERSTREET GRAIN CO.
Little Rock, Ark.

UNIFORM BILL OF LADING.

Editor American Elevator and Grain Trade:—An Illinois shipper writes us as follows:

"I inclose a 'peach' in the shape of a uniform bill of lading. You can judge what I think of it by the way I signed it."

The shipper signed the B. of L. under protest.

The terms and conditions of the uniform bill of lading are very unjust to grain shippers. They are forced to either sign them or to suffer a penalty of a 10 per cent higher rate of freight with a minimum increase of 1 cent per hundred pounds, and in signing them they agree to allow for differences of weight by variation of scales and by natural shrinkage. Scale weights at points of shipment and delivery seldom agree, but the light weight is just as apt to be on one side as the other, consequently variations should not always be charged against the shipper. According to terms of the B. of L. the allowance for variation of scales and for natural shrinkage is indefinite and can be waived entirely or made oppressive by railroad companies according to their "sweet will." But if cars are in proper condition when loaded and afterward receive no injury, there is no reason why natural shrinkage should exceed one-fifteenth of one per cent of shipper's weight under any circumstances, and in many cases grain will absorb as much moisture while in transit as it will lose at other times.

Yours truly,

BOGERT, MALTBY & CO. (INC.).
Chicago, Ill.

The Port Arthur, Ont., elevator made a new record on November 9 by unloading 130 cars of grain in eight hours.

OPPOSE THE UNIFORM BILL.

At a meeting of the Kansas Grain Dealers' Association, held at Wichita, the Association went on record as protesting against the uniform bill of lading, in effect in the West on December 1.

The same action was taken by the Oklahoma Millers' Association at a meeting at Oklahoma City on November 24.

On November 25 the directors of the Boston Chamber of Commerce adopted resolutions opposing the uniform bill, which will be presented to the National Board of Trade at its meeting in Washington on January 19, 1909. One objection upon which the protest is based is that the prescribed bill of lading "requires the signature of the shipper, who thereby contracts to accept all its conditions for himself and assigns whether or not they may abridge his and their common law rights." Another resolution reads, "That the approval of the Interstate Commerce Commission of this form of bill of lading has resulted in making it possible for transportation companies to evade their liabilities under the common carriers' law, unless the shippers pay a premium of 10 per cent over tariff rates."

The Pittsburgh Grain and Flour Exchange, through its official paper, the Hay and Grain Reporter, says:

The failure on the part of shippers to sign as shippers straight and order bills of lading is proving a serious matter, as the railroads are refusing to accept bills of lading when not signed by the shippers. It is the duty of shippers to make known, at the time the shipments are offered, the conditions under which they desire the shipments handled. If they are to be handled at the reduced rates, all that is necessary to do is to sign as shippers the bills of lading in the space provided. If he does not elect to accept the bill of lading conditions, he should so state in the bills of lading, and sign as shipper in the space provided, and under these conditions the shipment will be charged a 10 per cent higher rate, in accordance with the official classification.

It can therefore readily be seen that when bills of lading are not signed by shippers, no action can be taken by the railroads upon their surrender at destination until the matter is taken up with point of shipment and they in turn with the shippers arrive at an understanding as to the conditions under which the shipment is to be handled. Until this feature is clearly understood, the amount of charges to be assessed on the shipment cannot be determined.

Shippers should in every case see that bills of lading are signed as shippers, as well as see that they are properly endorsed, and thereby avoid delay and expense after the arrival of the shipments at destination.

The Texas Grain Dealers' Association and traffic clubs of that state will oppose any attempt by the railroads to enforce the use of the uniform bill of lading in the state of Texas. The secretary of the Grain Dealers' Association, in explanation of their attitude, says:

"Inasmuch as most of the grain for use in the Texas mills is shipped in from other states, the conditions imposed in the bill of lading will very materially affect the interests of the people of Texas. One of the features that works against the Texas people is Section 1, which provides that carriers will not be liable, among other things, 'for differences in weights of grain, seed or other commodities caused by natural shrinkage or discrepancies in elevator weights.' This, in my judgment, will open the way for unlimited litigation, for the reason that in this section of the country where the grain is sun-dried, there is practically no shrinkage, and where grain is weighed over good scales there should be practically no variance in weights."

"Another reason is because Section 2 of the bill, in the first paragraph, reads as follows: 'In issuing this bill of lading the company agrees to transport only over its own lines, and, except as otherwise provided by law, acts only as agent with respect to the portion of the route beyond its own limits.'

"This section is contrary to the provisions of the Interstate Commerce Act, as that provides that the original lines will be liable to the shipper for all demands."

"Another objection to the bill of lading is that the roads are permitted to take grain in bulk and unload it at destination into elevators after 48 hours, and to mix it with other grain of like grade. This is a bad feature, in view of the fact

that the shipper is required to pay demurrage on detained shipments."

"Another serious objection by the grain men is that the bill provides that railroads will be liable only for invoice price of grain damaged or destroyed. It often happens that the price of grain fluctuates radically in a few days, and such provision might prove detrimental to the grain shipper, as it might cost him a great deal more to replace the grain to fill his order in case part of the shipment came up damaged at destination than it originally cost him if he had not sold it at the price he did. In such a case the shipper ought not to suffer on account of acts of railroads where shipments are damaged or destroyed in transit."

"The railroads ought to be held liable for the value of the grain at the time it was damaged or destroyed, provided that the shippers get the notice of such damage or destruction. Such arrangements would be just to the shipper, who would be in position to protect himself by making other purchases with which he could fill the order to take the place of the damaged or destroyed wheat."

"The most serious objection of all is that the shipper is required to sign this uniform bill of lading to obtain the desired transportation for his goods, and the bill specifically states that the man signing it accepts all of the conditions imposed for himself and for all of his consignees. It is my honest opinion that should an enforcement of that section be made, and the case carried to the courts, it would be found contrary to law."

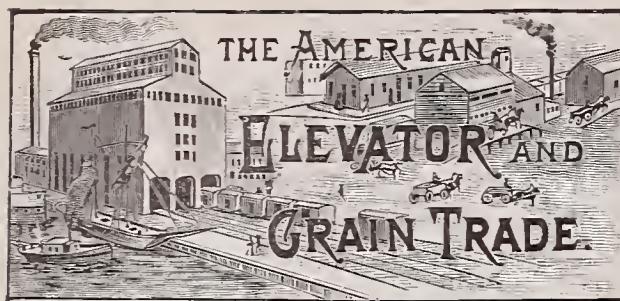
G. T. P. T. E. CO.'S FORT WILLIAM PLANT.

On November 15 work was formally started on the new Grand Trunk Pacific Elevator at Fort William, Ont. This elevator is a part of the first unit of four 10,000,000-bushel elevators which will ultimately be built at Fort William by the company. This first elevator will be designed and built under the management of the Chicago branch of James Stewart & Co., engineers and contractors, with Mr. John S. Metcalf of Chicago as consulting engineer, acting in the interests of the Grand Trunk Pacific Railway.

The final plans for the plant now under construction differ somewhat from the plans as originally proposed. The main features of the plant will be a working house measuring 70x240 feet, with a capacity of 750,000 bushels, and a 2,500,000-bushel storage annex broadside to it. In addition to these two main buildings there will be a dryer plant, a concrete dock, boiler house for heating and drying purposes and switch and transformer room. The operating power will be electrical, but the railroad company has not yet decided whether to purchase the power from a local station or build a plant of its own.

The unloading capacity of the elevator will be about twenty cars per hour. There will be a train shed four tracks wide and five cars long, making a total of twenty 2,000-bushel receiving car pits under the track. Power shovels will unload into the pits, which will be connected by belt conveyors with the legs of the working house. Of these there will be five receiving and five shipping legs, each with a capacity of 15,000 bushels, besides nine cleaner and screenings legs. All of the cleaning machinery will be on the first floor. On the scale floor of the cupola ten hopper scales, with a capacity of 2,000 bushels each, will be located. There will also be six shipping spouts from the shipping bins to vessels, capable of 60,000 bushels per hour. The auxiliary equipment of the elevator will include a passenger elevator, dust-collecting system, electric signals, bin ladders, electric lights and telephones.

The annex will consist of seventy bins twenty-four feet in diameter, arranged in ten rows of seven bins each, every two rows being filled by a belt conveyor overhead and emptied by one underneath, discharging into the shipping leg. The construction of the plant will be concrete and steel throughout. All will rest upon pile foundations, which will be 40 to 50 feet long, resting on a rock ledge underlying the site. It is expected that the house will be receiving grain next fall.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY
MITCHELL BROS. COMPANY
 (INCORPORATED)

OFFICE:

Manhattan Building, 315 Dearborn Street,
 CHICAGO, ILL.

HARLEY B. MITCHELL.....Editor
 A. J. MITCHELL.....Business Manager

Subscription Price, - - - - - \$1.00 per Year
 English and Foreign Subscription, - 1.75 " "

ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., DECEMBER 15, 1908

Official Paper of the Illinois Grain Dealers' Association.

THE UNIFORM BILL.

The address on the uniform bill of lading by Secretary Goetzmann of the Millers' Federation at Toledo recently is republished as a contribution to the literature of this subject, chiefly to show how the grain dealers' interests in this vital issue were neglected by the putative representative of those interests, and also to show how inadequate are all apologies for the bill of lading, even when made by the representative of interests which are large users of the order bill of lading. There is only one class of shippers who can safely use this bill—the big shippers, to whom the matter of "insurance" is not vital and who can afford to ignore it in the conduct of their business. It may be true, as Mr. Goetzmann concludes, that under the commerce Act a shipper cannot be deprived of his right of recovery on a bill waiving that right, but no man who has real good business sense voluntarily consents to a relinquishment of his rights and then starts a lawsuit to recover them.

Grain dealers must not be deceived by such reasoning. The only position for them to take is that of the traffic men of the Chicago Board of Trade and the St. Louis Merchants' Exchange and of the National Industrial Traffic League—a demand for a "simple bill of lading subject to the provisions of the law." In order to secure this, the plan of campaign must follow the suggestion of the Commerce Commission in their report on the uniform bill: "The relation between carrier and shipper ought to be well defined by law and be the same in each [all] state[s]. If this were accomplished a clean bill of lading would be possible, especially a clean order bill of lading.

A negotiable order bill of lading ought to be as clean as a check, draft or promissory note."

The grain man must use the present uniform bill of lading and sign it or stop business, for the roads will not handle his stuff unless he does use the bill, stating therein whether he relinquishing his right of recovery or pays the 10 per cent penalty to retain that right; but he should none the less continue to protest and join with every other shipper or class of shippers who mean to fight the present bill to a finish by creating a public opinion that shall be strong enough to force Congress to wipe away the multitudinous state laws on bills of lading, and to substitute therefor one general act that shall make a clean order bill of lading not merely possible but a fact.

THE INCIDENCE OF SCALEAGE.

The controversy at Baltimore regarding the incidence of scaleage taken by the public (railway) elevators at that port is pretty certain to throw a great deal of light on the old question of "dockage" which will benefit at least the country shipper who does his own thinking. Reduced to a plain, unvarnished and skeletonized statement, Baltimore, like a good many other markets, has, without telling him about it, been taking the scaleage from the country shipper and settling with him on the basis of the net and not the gross weight of the grain in his car. The public elevators, having come to the conclusion that that practice is not lawful but larcenous, now propose to issue a weight ticket showing the gross weight, deduct the scaleage and deliver out to the owner of the grain the net weight called for by his warehouse receipt. This will throw the incidence of the scaleage on the owner of the grain, who puts it in store at Baltimore, and not on the shippers of the grain in the West or on the Maryland farmers who send it in by water; and the Baltimore exporters and dealers in grain for domestic delivery do not like this change of custom because it makes them stand the loss.

The general principles of scaleage as the practice of taking it affects the shipper are discussed in connection with the general statement of the state of the Baltimore case (see page 311), in addition to which it may be said that dockage is now taken at Minneapolis and Duluth, New Orleans, Galveston, Omaha, Philadelphia, Buffalo, Kansas City, and perhaps some other places; but of all of these markets only Kansas City honestly tells the shipper on the certificate of weight that he is getting net weight only—that dockage has been taken from his grain to make good the shrinkage that should be a loss to the owner of the grain, as it has become in all markets where no dockage is taken, and which the Baltimore elevators are now trying to throw upon the owner of the grain while it is in their custody. Kansas City's frankness in the matter may or may not be spontaneous; but at least the elevator men there have had warning that if they do not give the shipper notice of the dockage from the true weight, the Railroad and Warehouse Commission of Missouri

will prosecute them for theft of the grain.

It is not our concern to argue this case at Baltimore; the lawyers will do that. But there is a loss in the passage of grain through terminal elevators as well as through country elevators. The question is, who shall stand that loss? Manifestly the owner of the grain should; and any effort of elevator men anywhere to saddle that loss by indirection on anyone else is not the Rooseveltian "square deal."

CLAIMS DEPARTMENT.

As will be seen by reference to the report of the last directors' meeting at Springfield, the Illinois Grain Dealers' Association has decided to establish a claims department to be administered by a claims committee whose duties are set out in the resolution itself.

It is easy to see how the committee may be able to assist claimants who now pay no attention to many losses, because they are too small to warrant employing an attorney to look after them; on the other hand, if the committee in good faith shall put a brake on the filing of fraudulent, unauthenticated or mere "guess-at-it" claims, they will do all legitimate claimants an inestimable service by clearing the claim agents' desks of a vast number of claims that divert attention from more righteous ones.

If, then, the committee further shall insist—as they must, if they hope to really benefit the trade they are seeking to help—that all claims filed shall be uniform in form; shall be accompanied by all necessary documents and by proper affidavits to sustain the claim of loss, they will be able to expedite adjustments and to secure that attention from claim agents for authenticated claims which they merit and which they would receive were not the claim agents' desks buried under claims both trivial and of no merit in themselves and without documentary evidence of the loss upon which those claims are based.

COMPETITION IN CORN.

Colonel Clark E. Carr, of Galesburg, is distinguished among other things as having been the first American to sound the praises of American corn (maize) in Europe as a food cereal for man as well as beast. His own recollections of that work make an interesting story; and yet it would be a safe guess that were he to have put in as much missionary work at home to the same purpose his visible rewards would not have been much greater than they were in Europe.

In speaking of that interesting line of work at the Illinois Corn Exposition, Mr. Carr's enthusiasm carried him, however, into one blunder of fact that was a fact in his time, if not now, to wit, that we have as corn growers no rivals in the European markets. It need not be said to those of "our day and generation" that the Argentine has already become a brisk competitor in corn as in wheat, and is likely, as the years go along, to become still more active in that line; for in corn, as with wheat, that clever mot of Mr. Pffarrius of New York

holds good. Speaking of the damage to wheat in the Argentine, he said: "What difference does it make? They'll keep the damage and ship the wheat."

THE CORN SHOWS.

At first the corn shows were but exhibitions of corn *a la* the county fair. More recently there were sandwiched in the corn-judging contests; then came lectures on the art and science of breeding corn; and at last talks on the culture of corn as that work obtains for the every-day farmer who makes the merchantable crop. The National Corn Exposition now in progress at Omaha has gone even farther. It has become a great exhibition of all cereals and grasses and a popular "short course" of instruction as well in many branches.

For example, during the first days (December 10 and 11) Mr. Smith, chief deputy of the Chicago inspection office, spent two days at Omaha, during which he conducted the examinations of a number of university and agricultural college teams working on the inspection of oats, giving at last first prize to the Ames team, second to the Kansas team and third to the Missourians. This was followed by a talk to an audience of about 400 farmers and students on the practical science of grain inspection in general. This is but a hint of all that took place at Omaha, where to-day is grain dealers' day, with the educational work devoted wholly to oats and the betterment of that crop.

To what does all this tend? Well, it seems to mean, first, better farming and more grain. Were it not so, the "shows" might as well be abandoned except as a welcome break in the monotony of "continuous vaudeville." But it tends also to the production of better grain and to a better understanding by the growers of what constitutes better grain. As that consciousness becomes more and more widespread, it will mean a seller of grain in the country less contented with the present method of lumping everything as "3 or better." Every properly conducted "corn show" means several nails in the coffin of a system that compels the grower of good grain to offset his grain with that of a farmer who will deliver nothing but poor grain and that in a foul condition. It certainly is unthinkable that, with the improvement in grain and knowledge of it that the "corn shows" aim at, the commercial grade of grain shall continue to be as low in stated quality as it now is, and which the system of track buying logically tends to make and keep just as low on the average as possible, in order that the elevator man by conditioning and mixing may be able to make the cream of the profits of the business of marketing grain, at the expense of the growers and, in part, of the first handlers also.

The Chicago Board of Trade election will take place in January, when Hiram N. Sager, president in 1907 and 1908, will retire, having so elected to do after an administration that has resulted in immense material benefits to

the Board, but which has been conducted with the most gentlemanly modesty and reserve, showing that Mr. Sager is not only a resourceful and forceful man, but one of great reserve power. As he has refused to again be a candidate, several are talked of as his successor, among whom are W. N. Eckhardt, director and chairman of the grain committee; John Bunnell, at present vice-president; John B. Adams and E. W. Bailey.

SOUTHERN DOCKAGES.

The complaints the Kansas and Oklahoma shippers to the Gulf make about dockages remind one (not to treat the matter with too much levity) of the patient who told his physician that every time he drank beer it made him bilious and gave him a headache. "Now, doctor, what can I do about it?" "Well," replied the learned man, "you might stop drinking beer."

It is, of course, "hard luck" for a shipper to have his stuff misgrade on him; but if he enters into a contract to ship "3 or better," and gives the buyer the right to inflict any arbitrary penalty the latter may elect, if the shipper does fail to live up to his contract, what is to be said, except that the shipper ought not to have made such a contract at all, but ought to have made a different one with someone else?

The complaint Secretary Smiley formulates in his Circular No. 11 will appeal to all "3 or better" shippers; but either the shippers interested must stop making such contracts and consign on their own account, or buy driers and condition their grain so that they will not be liable to the dockages complained of; for it is hardly likely the consignees will voluntarily relinquish so valuable a privilege under their contracts.

And not Kansas and Oklahoma dealers alone suffer from this jug-handled kind of contract.

UNIFORM GRADES.

During the past thirty days the Peoria Board of Trade adopted the National Association's "Grades of Grain" and will put them into effect on July 1, 1909. The Grades have also been approved by the Ohio State Millers' Association, and also by the dealers of Dayton, O., and the grain trade section of the Cincinnati Chamber of Commerce, subject, in the latter case, to the adoption by the board of directors.

In this connection the trade will sit up and take notice of the fact that both Senator McComber and Representative Gronna of North Dakota have declared themselves "loaded" with National inspection. Mr. McComber gives notice he will "push his wheat inspection bill to the very limit," while Mr. Gronna will introduce a new bill to reduce the powers of, or discretion given to, the Secretary of Agriculture by the bills under discussion.

If it were not for the disorder occasioned to the trade thereby, one might wish to have the North Dakota statesmen's bills in operation just one season to see with what a slam

the North Dakota farmers would put them on the shelf of political oblivion as a result of the preposterous blunder they are trying so hard to make at Washington.

LIGHTNING LOSSES.

Secretary Reynolds of the Millers' National Insurance Company publishes a statement of lightning losses for 1908 that repeats the startling record of damage done to grain elevators by that elemental risk. Of the total number of losses of the company from this cause, elevators furnished 76 per cent, while of the losses sustained elevators furnished 65 per cent, against only $\frac{1}{2}$ of 1 per cent for mills and 34 $\frac{1}{2}$ per cent for all other kinds of property.

The record discloses a singular indifference to the risk from lightning attaching to elevator property; since owners apparently do not attach proper significance to the isolated situation of most elevators and the consequent risk from lightning which attaches to such isolation. The isolation can hardly be guarded against or obviated; but the lightning stroke can be guarded against by the erection of a properly constructed and insulated lightning rod; and so far as known that is the only protection that can be resorted to.

DON'T OVERDO IT.

Mr. Metcalf, an employe of the Chicago Weighing Department, in a paper printed on another page, calls attention to a danger the trade is confronted with, of having the "leaky car problem" discredited before claim departments of the carriers by what are apparently exaggerated reports of leakage by weighing department officials. That 72 per cent of the grain cars arriving at any terminal should be reported in bad order, indicating loss of contents in transit, seems preposterous when compared with the percentage returned by other markets. We have no idea where such a report originated; but under the circumstances, it does look like an effort to manufacture evidence of loss through an excess of misdirected zeal, no doubt in good faith.

Nothing disgusts a cold-blooded (he has to be that) claim agent more quickly than symptoms of hysteria; and claims of a loss of a bushel or two of grain out of a car holding from 600 to 1,000 bushels, after traversing several hundred miles, more or less, to market—as it must be inferred must constitute approximately a goodly share of the losses that would result when 72 per cent of all the cars arrive in bad order—certainly give a color of suspicion to mental disorder somewhere. The grain trade must be reasonable. There are many petty losses incidental to every line of business that cannot be recovered from anyone and which diminish the profits of trade; and the grain trade is so fortunately free from one that afflicts so very many other lines—to wit, bad accounts—that it can well afford to be reasonable about others that all have to suffer from and are counted as the expenses of the business.

EDITORIAL MENTION

The annual meeting of the Illinois Association will be held this year at Peoria.

Pending the settlement of the "scaleage" complaint by the I. C. C., Baltimore is taking the scaleage out of the shippers' grain.

The sixteenth annual "Directory of Illinois Grain Dealers" is now ready. Those who still are without copies should address Secretary S. W. Strong at Pontiac.

The Santa Fe Elevator, Chicago, has passed into the hands of the Armour Grain Co., who will make it a strictly private house. The new owners took possession on December 14.

The Pittsburg Grain and Hay Reporter, organ of the Pittsburg Grain and Flour Exchange, on November 17 celebrated its birthday and began its sixth year of usefulness. Well, good luck.

The steel grain car may not come as soon as we might hope for it, but it will come in a comparatively short time if only for the reason that lumber will soon be too expensive to use to build such short-lived structures as freight cars.

The Erie Canal closed on November 30 after a season of higher rates and a shrinking business. The year's business, however, is no criterion of what may be the business of the enlarged canal, after it is opened for traffic a few years hence.

The monthly magazines are vigorously circulating the fallacy that the grain of the great farms of the United States is poor in quality. The grain is as good as it ever was—better; but we may not be improving its condition, perhaps, by our method of handling it.

The moisture tester and drier are not quite so imperatively essential to safe work with corn this winter as last, but every careful shipper will own a tester and make sure of his grain by frequent tests; and if he handles a large quantity of corn he will own a drier, too; several of which should be found in terminal markets at least for conditioning grain to go into store.

J. M. Gruber, general manager of the operating department of the G. N. Ry., predicts that it is "only a matter of time when elevators will be built at all the stations through the wheat-raising districts of the Pacific Northwest, facilitating the handling of wheat and making it easier in every way for the farmer to dispose of his crops." During the past year no less than ten elevators have been built on the line of the G. N. and probably as many more on the new line of the C. M. & St. P. The "matter of time" may be as long as is required to complete the Panama Canal; for certainly after that channel is ready for use the old tradition that wheat will carry from the Coast to Europe only when sacked

will be sent to the scrap heap with others of like nature.

The newspapers say there is a "20,000,000-bushel corner" going in May wheat at Chicago. This, then, would be a good time for small fish to get into some other pond.

After all, when one "gets down to brass tacks," he finds that it's corn that makes for real prosperity. So welcome to the "corn show" that means more corn wherever it will grow.

W. I. Glover of Cozad, Neb., is the last man to be accused by the reporters of propagating "seed corn over 2,000 years old." He has some of the putative product on exhibition at Omaha.

The fire losses in the United States and Canada for the first eleven months of 1908 reached the enormous sum of \$224,593,100, against \$199,879,400 for the same months of 1907. In other countries, save the new ones of this hemisphere, such an annual loss would spell ruin; but our own resources are so enormous we must needs waste them in jerry-building of all kinds.

The German grain exchanges are again kicking about the quality of American grain arriving on "accompanying certificates." A people who complain in such terms as "unscrupulous exploitation" are rather hopeless on general principles. Men who really have a good case are more moderate in their use of language, even the German, which sometimes sounds a good deal worse than it means.

The rebate case at Norfolk, Va., in which W. R. Johnson & Co., grain dealers, were interested, turns out to have involved not only the grain men but the railroad traffic men who made the rebating easy by countenancing false billing and nearly every other kind of subterfuge to hide the irregularities. One therefore has little sympathy for the assistant general freight agent of the C. & O. Ry. Co., who was convicted at the trial as having guilty knowledge of the fraudulent schemes enacted by the shipping clerk for Johnson & Co. in the reconsigning of grain to North Carolina points.

The Commerce Commission has decided to withdraw its order prohibiting the payment of the "elevation allowances" until July 1, 1909, by which time the courts will have passed on their legality. This is as well, since it must come to that at last, and the withdrawal of the order clears up the situation until the status of the allowances contracts is adjudicated. Meantime the issuance of the order itself has disclosed the fact that almost every elevator in the country that handles the country shipper's grain, or grain bought in the country, as a "transfer" now demands the "allowance" as a matter of right—so quickly does an abuse in trade assume in this country the countenance and assurance of a "vested right." But in the same meantime,

however, it is not observed that there is any demand on the part of these same transfer elevator men that the country shipper also should have "rake-off" from "the rate" in the shape of a "loading fee" for performing the reverse service done by the "transfer" elevator which unloads its own grain into its own house. By no means; "that's different."

The newspapers of the country have again "dug up" from the stereotype box their last year's editorials on the "free seed farce." One before us, however, is one we have not seen hitherto. It is from a southern paper, where the "Faithful" are said to be few and far between and it is easy to be high-minded and disinterested and all that; therefore, "it is not necessary that we should accept a small parcel of worthless seed, put our honest labor into them, toil through winter's cold and summer's heat only to find that we have sown tares and shall reap failure." Now, that's what one would call "the stuff."

As a sample of the law's delay in this country that is like a thorn in the flesh of business men, it appears that the attorneys interested in the settlement of the Southern grain and lumber rate cases recently heard at Atlanta before the Court of Appeals and the Interstate Commerce Commission do not expect a decision from the Court of Appeals before February or March next, or from the Interstate Commerce Commission before next June. The action was to prevent an increase of rates, which increase, owing to the decision of the trial courts, is now in force. Without presuming to utter one word of criticism of this particular case, it must be said that one of the most serious of American problems at this hour is how to obtain prompter judicial decisions in important cases, such as this, which affect not only individuals, but a large number of persons and interests not directly parties to the action.

The radicalism of the farmer in the Canadian West has long had in mind the nationalization of the elevator system of that country: and opinion on the subject has become so clamorous, at least, that on November 26 the premiers of the three provinces of Manitoba, Saskatchewan and Alberta held a secret conference with the representatives of the grain growers of those provinces to discuss the question. The proposition laid before the premiers was, that—

the government among other things should provide by purchase or construction or both, at each railway point where any considerable quantity of grain is marketed, elevator facilities with up-to-date equipment for cleaning, weighing and loading grain; that these facilities for the most part be subdivided into bins of 1,000 bushels' capacity, and that the system be operated by the government direct, or through a commission appointed for that purpose; that the minimum capacity required at each shipping point will be approximately one-third of the quantity annually marketed there; that the government system shall enable the farmers to clean grain to grade requirements before shipment, to retain the large amount of screenings valuable for feeding purposes and increase their chances of obtaining higher grades when grain is inspected and save them from payment of freight on screenings from point of shipment to the terminals, etc.

In other words, these modest people want the government to provide all the facilities at

elevators the farmer should own on his farm, and handle the grain of several hundred thousand farmers each in a separate car and separate bin, and so on. The whole scheme is simply preposterous; but the premiers, like nerveless politicians everywhere, instead of pointing out the absurdity and impracticability of the entire scheme, promise to give it "careful consideration." At this rate one can see what is coming to the Canadian West.

Duluth and Winnipeg have each been struggling for a new "record" of shipments this fall. At Duluth-Superior during the week of December 5, 11,794,000 bushels of grain were shipped, this being probably, as claimed, the largest total on record at any port. At Winnipeg during November about 15,000,000 bushels of wheat alone were handled, being that town's "record" for a month, although the signs point to a greater one for December. These are really tremendous totals; the immensity of which is a striking tribute to the inventive skill of our architects and engineers who have made such labor possible and tolerable to human beings.

It is a fact that the United States has begun in a small way to import grain. It had, in fact, done so to a certain extent several times before December 7, when a Duluth firm imported a lot of Manitoba flax (duty 25 cents) and oats (duty 15 cents) and sold both at a profit. But what does it all amount to? The country has hardly gone to a deficiency basis as yet. Probably a more striking circumstance was the importation of Canadian wheat by Mexico, in bond across United States territory. The phenomena, too, make it apparent that any effort in Congress now to repeal the duties on cereals or other grain products will be greeted by a hot resistance by the Northwestern farmer—indeed by all farmers who have been "paying freight" so many years in the past without appreciable benefit or returns.

Another privilege that, like the "allowances," has invaded not a few markets is the milling-in-transit privilege, which the Commerce Commission has ordered discontinued at the gateways to the Southeast, in so far as the privilege has permitted a "substitution of tonnage." It is not expected, says the Commission, that "the identity of each carload of grain, etc., can or will be preserved, but in the opinion of the Commission it is unlawful to substitute at the transit point, or forward under the transit rate, tonnage or commodity that does not move into that point on the same rate, and tariffs which contain any provisions which authorize in terms or by interpretation any such practice must be at once corrected." Against this interpretation of the law all these points have entered a vigorous protest. In New York a phase of the same question is now before the United States Circuit Court on the application of the Hecker-Jones-Jewell Milling Co. All these various "kinks" affecting rates are very disconcerting to the "plain man" who goes to the "tariff on file" and tries to figure out "the rate,"

say from Illinois or Iowa into the Southeast, should he try to sell into that part of the country in competition with a dealer at the "gateway" who is "on."

Another reform that somehow must be brought about is a regulation, or rule, or law, whichever may be necessary, making the carrier's agent responsible for a rate quoted by him. It is unreasonable to expect the shipper to know the rate he shall pay to any and every destination to which he may wish to ship, but the carrier's agent is expected to know it, for it is a part of his business. In all things else he is able to bind his principal as the carrier's agent; why should he not be equally responsible in quoting a rate? Surely the Commerce Commission should be able to devise some other method for punishing railroad traffic men who quote false rates for a purpose, that shall not throw the burden of finding the correct rate on the shipper. In no other line of business is any other duty cast on the person who deals with an authorized agent than to ascertain if the alleged agent is in fact an authorized person; and no valid argument, except the Commission's wholesale suspicion of the native honesty of railroad men in general, has been offered to support its present ruling that the carrier's agent does stand in a different attitude as an agent of the company than do other agents to their principals.

The new method adopted by the Illinois State Grain Inspection Department, heretofore applied only on the C. M. & St. P., C. B. & Q. and C. & A. railroads, was made effective on all lines on November 23. The drizzling rain and, therefore, dark and very unfavorable weather made this addition to the work an unusual task and brought out some criticism, but the business handled recently on the three roads demonstrates that the chief inspector has found a way for a vast improvement over the old system of handling and inspection. It will undoubtedly create that uniformity in grading so essential and important for the protection of all interests. Incidentally it brings within reach more satisfactory and substantial facilities for proper and correct sampling of the grain.

This is the way one of the largest and most influential cash houses on the Chicago Board of Trade records the final consummation of the most important reform that the state Grain Inspection Department at Chicago has ever undertaken, as many think. It is true, there were some delays for a short time after putting the new method at work on all the roads, but then every improvement in any mechanism or custom necessitates that for a time. At this time, however, the inspection service in Chicago is undoubtedly better in every respect than it perhaps ever has been, certainly is better than at any time in the past fifteen years. In view of the fact that at every step of the development of this new method there has been strong objection to it on the Board, and in view of the official refusal now of the directors to permit the Inspection Department to deliver its samples on the floor of the exchange, one begins to lose some of his confidence in the theory this paper has always stood committed to, to wit, that exchange, or board, control of the inspection is always and under all circumstances pre-

ferable to state control. It all depends; and four years of an inspector who feels himself amenable to public opinion and is genuinely progressive and ambitious has certainly put a new color on this question in Chicago.

The Seneca Farmers' Elevator Co., at Seneca, Ill., has quit and sold its elevator. This company during its career of several years was frequently cited as one of the model farmers' elevators, a living, militant example of what "co-operation" would do for the farmer. It handled immense quantities of corn and oats annually, practically driving the regular dealers out of business for a time, and it even made some money; but only on successful trades in "options," however. These, so long as they were profitable, as they happened to be in a year of rising markets, were permitted by the directors. Ultimately the practice swamped the company with debts to money loaners, and it is even said there was a heavy shortage in the accounts of the company. It was a "gay life" for a time; but the stockholders are wiser now and are willing to dance to slower music.

The embargo put on the movement of hay eastward from the great hay states of the Middle West has caused a sharp advance in prices at the Seaboard and New England markets, and may mean a veritable famine for those unable to pay embargo prices, before the foot and mouth disease shall have been stamped out and normal traffic conditions removed. Supplies will have to be obtained by those markets from other states not invaded by the infection, and that means they will have to go farther west to interior markets not usually called on by the Atlantic Coast. The embargo is not, strictly speaking, prohibitive, but the regulations (see Mr. Goodrich's letter in the "Communicated" department) are so exacting they amount to a practical prohibition. The situation is a most unfortunate one, and will cost Michigan and other affected states a lot of money before it is over, we are afraid.

The attacks from North Dakota on "bleached flour," culminating in Secretary Wilson's ruling that it is an "adulterated product," is alleged by some to be an effort to in some way narrow the price spread between durum and straight northern spring wheat, now about 25 cents per bushel. Some of the growers reason that the millers buy durum at this big discount and mix it with spring wheat and then bleach the product. The millers deny this; but the agitator-farmer repeats his assertion just the same. If this is the state of the case, the judgment behind the attack on "bleached flour" seems faulty. The bleaching should have been encouraged, and in time the demand for durum as a mixing wheat for strength would be so increased as to wipe out the discount, because the bleacher, if the theory is correct, by removing the objectionable color durum flour now has and which makes it practically unsalable, would increase the demand for durum wheat.

TRADE NOTES

The Bourse, Philadelphia, is distributing a calendar memorandum pad that will be found useful by most business men. It is arranged to be hung up, and if used as intended will serve as a daily reminder of business engagements and the like.

The Decatur Cereal Co. of Decatur, Ill., has given an order to the Minneapolis Steel and Machinery Co. for cross-compounding their present Twin City Engine by adding a 48x48-inch low-pressure side. This will give them double the power they had before.

Ware & Leland, Chicago, are reminding shippers of their facilities for handling consignments and futures by sending out a paper slip with a medallion bearing the firm's card. Ware & Leland say that the shipper's interests are their interests and have this in mind constantly in their dealings with the country trade.

McLeod Bros. of Bloomington, Ill., manufacturers of the McLeod Automatic Grain Scale, have added some new features to the scale and made a few changes which, they say, will make it "better than ever." The new scale will be ready for shipment early in January and orders may be placed at once for this scale.

The Hess Warming & Ventilating Co. of Chicago has just finished the installation of a mammoth Hess Drier for export trade at the West Shore Elevator, Weehawken, N. J. This drier, with two at Baltimore, and one at Philadelphia, brings up to four the number of 3-unit Hess Driers now in use along the Atlantic seaboard. Two other Hess Driers of the same size are also in operation at New Orleans and Chicago.

The Burrell Engineering & Construction Co., 108-110 La Salle St., Chicago, are sending out a clever bit of advertising in the form of a blotter with a list of firms for which the Chicago company has built or remodeled elevators or furnished plans to. The Burrell Engineering & Construction Co. say that these people have "blotted out their troubles," and the inference, of course, is that the recipient of the blotter can do likewise by placing his contract with them.

With the December, 1908, issue of Graphite, this publication celebrates its tenth anniversary, and to commemorate the event, it issued a special number. Usually its pages do not exceed 12, but for this particular issue they ran to 20. Unfortunately, information on house organ history is difficult to secure, but there is little doubt that the Dixon Co.'s house organ is one of the oldest that has been continuously published since its first issue. Especial attention is directed to the new title piece. This is quite an artistic piece of work and exemplifies the development of Graphite.

RICE FARMERS ORGANIZE.

Rice farmers of Louisiana, following the example of those of Texas, have organized the Louisiana Rice Farmers' Association with forty-five to fifty active members. W. B. Gabbert was elected president; H. L. Longenbach of Iowa first vice-president; A. T. Jones, secretary and treasurer; B. A. Richart of Jennings; Worthy Querreau of Gueydan, and J. P. Burdin of Crowley, vice-presidents at large. Committees were appointed to draft a set of by-laws and submit them to the next meeting.

A correspondent from Welsh, La., where the Association was formed, says: "A strong feeling has prevailed through the rice district that the time is ripe for the planters to unite in protecting their industry from the warfare that has been waged against it during the past few years by certain interests who have sought by the circulation of false and misleading reports to bear the market for their own personal ends. The movement here is but the crystallization of this feeling into concrete form by which a definite and united

opposition can be maintained against these and other damaging influences."

About the same date the growers of Jefferson County (Beaumont), Texas, adopted a resolution indorsing the stand of the State Rice Farmers' Association in deciding to hold No. 1 Honduras rice for \$3.50 per sack for the next sixty days (to January 19) and Japanese at \$3.

The Association also indorsed the work of the Rice Association of America in sending delegates to Washington to appear before the Ways and Means Committee of the House of Representatives on November 19 to protest and argue against any change or revision that would remove the tariff on rice.

H. C. JONES.

The head of the new Baltimore firm of H. C. Jones & Co., Harry C. Jones, is by no means a stranger to the trade in and shipping to the Monument City, for he has been a member of the Chamber of Commerce and associated with several of the leading firms of Baltimore for a number of years.

Mr. Jones began his connection with the hay



H. C. JONES.

and grain commission business of Baltimore as long ago as 1884, when he became connected with the house of Levering & McAtee, now out of existence. Upon their retirement in 1888 he went to the firm of C. Bosley Littig & Co., with whom he remained until his recent withdrawal to form the new firm of H. C. Jones & Co., to conduct a grain and hay commission business with offices in the Chamber of Commerce building.

In the meantime he has been a director of the Chamber of Commerce and a member of the committee on commission rules, he has also been a member of the National Hay and New York State Hay associations, in whose affairs he has taken an active interest.

Outside his business organizations he is not a "jiner" by any means; but he is prominent in Masonic circles in Baltimore and senior major of the 4th Infantry, M. N. G.

The large grain elevator which was abandoned by steamship Ocean about 100 miles north of Tory Island during stormy weather, as mentioned in these columns a month ago, was picked up by a couple of steam trawlers at Rockhall and towed safely into Stornoway, Ireland. The elevator was being towed to Montreal by the Ocean and she encountered such terrible weather that it became necessary to cut the elevator adrift and abandon her. The elevator was said to be insured for \$120,000, and as the trawlers will be entitled to full salvage rates, it will prove a rich haul for them.

SOUTHERN DOCKAGES.

Among other matters considered at the late meeting of the Kansas Grain Dealers' Association at Wichita was that of the dockages made by southern exporters, which Secretary Smiley has formulated in the following circular No. 11, to his members under date November 11, 1908:

We invite your attention to the following scale of dockage which the exporters of grain from southern ports are attempting to foist upon the trade:

No. 4 corn, three cents per bushel.

No. 5 corn, five cents per bushel, if merchantable.

No grade corn, seven cents per bushel, if merchantable.

Under the rules of the Galveston Board of Trade the following maximum limits shall govern all inspection and grading of corn:

Per cent dirt	Per cent Moisture.	Per cent and broken	Grades.	Nov.-Mch.	Apr.-Oct.	damaged.	grains.
			1	13	12	1	0
			2	15	14	3	2
			3	17	16	5	3
			4	20	20	10	5

Nos. 1, 2, 3 and 4 mixed corn shall be corn of various colors and sweet. No. 5 mixed corn shall be all mixed corn that fails to meet the requirement of the above percentage table, but is not in a heating condition.

You will note from the above table that No. 4 corn will not permit of more than 20 per cent of moisture from November 1 to March 31. As you know, there is a great difference between good No. 4 corn and poor No. 4, but it is all docked alike. From what corn we have seen in the central and northern part of the state, we do not believe that there is 10 per cent of it that will not contain more than 17 per cent of moisture on its arrival at Gulf ports during the months of November and December. You should bear in mind that corn shipped to Southern ports during the winter and spring months accumulates moisture in transit and the longer in transit the more moisture it contains.

An inspector of fifteen years' experience advises us that exporters make their money out of dockages. For instance, take the exporters' bids for this present season on the basis of No. 3 or better corn; they realize that a very small percentage of the corn received will apply on contracts, and this unusual dockage applied will show them a handsome profit.

If you expect to ship as much as 50,000 bushels of corn during the present season, I would recommend that you purchase a moisture tester that anyone can use, using gasoline, alcohol or kerosene, for the purpose of making moisture tests. This can be purchased for \$40 complete f. o. b. Chicago.

After consideration of the subject and discussion of the situation, the meeting adopted the following resolution:

We, the Kansas grain dealers, in meeting assembled at Wichita, Kan., hereby protest against the dockage of corn for export at Gulf ports as now established by exporters and their agents, and hereby request that the chair appoint a committee of three to meet with a like committee from the Oklahoma Grain Dealers' Association to meet with the exporters and their agents at the earliest date with a view of having the exporters modify their dockage rules.

The Chair, Pres. R. E. Cox, appointed as such committee from Kansas, Messrs. Kelley, Hupp and Allen.

PUBLIC ELEVATORS OF IOWA.

The West Council Bluffs Improvement Club has begun legislative activity looking to the enactment of a public elevator law for the state of Iowa. Something of this has been heard of in the same quarter before this, Senator C. G. Saunders having presented a bill, we believe, to the same purport at the last session of the Iowa Legislature, when it was too late to have it considered. The club now, by resolution, asks the senator to use his influence at the next meeting of the Legislature for the passage of such a law. He was further asked to introduce a bill for a law requiring the inspection of grain by officials of the state of Iowa.

The record cargo this season out of Ft. William was 421,000 bushels of wheat on the Meacham for Buffalo.

FACTS and FIGURES

Owing to the short wheat crop of Mexico, which has caused the mills of Saltillo to shut down, the government is urged to suspend the import duty of 40 cents per bushel.

The grain trade of the Cincinnati Chamber of Commerce has been for some time considering changes in the weighing and tariff rules in that city, but no definite conclusion has yet been reached.

A farmer living northeast of Calgary, Alberta, thrashed out 10,000 bushels of wheat, worth a nice lot of money—if he had it at the railway; but he is 32 miles away, and to get his grain to the car means at least 100 64-mile trips for a four-horse rig.

A wagonload of corn, shucked off the farm of George R. Gibson, who donated it to the women of the Christian Church of Mexico, Mo., was sold at auction on the public square of that place. The load contained 50 bushels and sold in 5-bushel lots, bringing \$1 per bushel.

Country newspapers of Ohio, in view of the heavy shrinkage of winter wheat area, advocate now the seeding of spring wheat in that state, believing that at least one good crop can be secured, although after one year the crop is usually a failure in Ohio, it is claimed.

Kherson oats gave the best results when sown at the rate of eight pecks per acre in some experiments at the Nebraska Agricultural College, but this did not prove true of other varieties. The Kherson oat plant tillers freely when sown thinly, but few tillers were formed when twelve or more pecks per acre were sown.

The most valuable cargo of grain ever loaded on the Great Lakes left Duluth on November 15, says the Commercial Record. It consisted of 400,000 bushels of flax on the D. R. Hanna, loaded by the American Linseed Co. and consigned to themselves at Buffalo. Larger cargoes of grain have been carried, but at a different price. This cargo was worth \$1.40 in Duluth and was insured at \$1.45 per bushel, making its actual value at Buffalo about \$580,000 and with the vessel fully \$1,000,000 in money afloat.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending Dec. 12, 1908, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending Dec. 12.		For Week Ending Dec. 14.	
	1908.	1907.	1908.	1907.
Wheat, bushels.	2,571,000	3,403,000	2,903,000	3,495,000
Corn, bushels.	1,400,000	845,000	2,057,000	583,000
Oats, bushels.	2,000	2,000	4,000	16,000
Rye, bushels.	63,000	8,000	56,000	
Barley, bushels.	10,000	127,000	14,000	
Flour, bbls.	321,900	254,000	220,600	294,900

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Dec. 12, 1908, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore	695,000	535,000	166,000	206,000	2,000
Boston	445,000	131,000	38,000	31,000	40,000
Buffalo	3,570,000	168,000	1,272,000	71,000	1,736,000
do. afloat					
Chicago	5,402,000	1,196,000	897,000	55,000	1,171,000
do. afloat					
Detroit	735,000	377,000	191,000	80,000	
do. afloat					
Duluth	5,058,000	.....	871,000	13,000	413,000
do. afloat					
Galveston	684,000	450,000	.....	
do. afloat					
Indianapolis	451,000	87,000	359,000	.....
Kansas City	3,714,000	27,000	326,000	.....
Milwaukee	568,000	82,000	309,000	39,000	511,000
do. afloat					
Minneapolis	13,036,000	9,000	1,994,000	137,000	1,248,000
New Orleans	484,000	550,000	146,000	.....
do. afloat					
New York	2,925,000	369,000	825,000	110,000	244,000
do. afloat					
Peoria	1,000	135,000	719,000	25,000	4,000
Philadelphia	1,312,000	190,000	59,000	32,000	
St. Louis	2,767,000	35,000	605,000	26,000	191,000
do. afloat					
Toledo	605,000	281,000	224,000	72,000	
do. afloat					
On Canal	.....	70,000	24,000	.....
On Lakes	8,936,000	.....	163,000	216,000	551,000
Grand total	51,458,000	4,612,000	9,188,000	1,113,000	6,111,000
Corresponding date 1907	45,468,000	2,762,000	7,259,000	863,000	5,839,000

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of November, 1908:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1908	1907	1908	1907
Wheat, bushels	831,817	1,699,855	801,406	1,700,957
Corn, bushels	911,186	1,031,987	57,082	688,277
Oats, bushels	156,924	309,812	1,300	374
Barley, bushels	33,015	.....	24,981	.....
Malt, lbs.	.....	.....	.....	.....
Rye, bushels	82,418	91,035	8,571	42,856
Timothy Seed, lbs.	871	.....	2,532	10,033
Clover Seed, lbs.	5,925	680	250	.....
Hay, tons	5,271	5,670	2,180	2,142
Straw, tons	.....	.....	.....	.....
Flour, bbls.	273,433	288,988	127,605	132,110
Meal feed, tons	.....	.....	.....	.....

BOSTON—Reported by Daniel D. Morris, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1908	1907	1908	1907
Wheat, bushels	831,817	1,699,855	801,406	1,700,957
Corn, bushels	911,186	1,031,987	57,082	688,277
Oats, bushels	156,924	309,812	1,300	374
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Timothy Seed, lbs.	871	2,532	10,033
Clover Seed, lbs.	5,925	680	250
Hay, tons	5,271	5,670	2,180	2,142
Straw, tons	.....	.....	.....	.....
Flour, bbls.	273,433	288,988	127,605	132,110
Meal feed, tons	.....	.....	.....	.....

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1908	1907	1908	1907
Wheat, bushels	1,758,300	1,114,610	679,575	4,480,624
Corn, bushels	5,284,013	4,137,753	3,719,059	4,647,670
Oats, bushels	5,883,620	5,706,795	5,445,887	5,012,169
Barley, bushels	1,996,087	1,240,893	716,812	566,533
Rye, bushels	177,000	217,810	68,752	89,817
Timothy Seed, lbs.	4,071,222	5,816,585	938,784	2,149,280
Clover Seed, lbs.	765,461	467,600	495,669	380,604
Other Grass Seed, lbs.	3,542,063	1,134,560	3,237,045	4,179,728
Flax Seed, bushels	242,880	177,713	2,576	6,000
Broom Corn, lbs.	3,606,246	2,975,329	1,761,775	1,828,595
Hay, tons	21,635	30,351	1,708	1,714
Flour, bbls.	804,774	707,393	872,997	1,070,971

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
1908	1907	1908	1907	

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FIELD SEED SECTION

REPORT OF SECRETARY OF AGRICULTURE.

In his annual report for 1908 Hon. James Wilson, Secretary of Agriculture, among other things, says:

"Work on Corn Improvement.—Gratifying results have been secured during the past year in the breeding of improved strains of corn. The breeding work has been conducted so as to cover a wide range of territory, extending from the most southern through the central and into the most northern states. As a result of the work the past three years a high-yielding strain of corn showing remarkable adaptability to dry-weather conditions has been developed in Texas. This strain has proved of value in Arizona and other parts of the Southwest.

"The breeding of strains of corn for increased yield, greater uniformity, and adaptation to soil conditions in localities where grown has been continued at points in Tennessee, Virginia, Maryland and Ohio. At all of these points the Department's selections have shown their superiority to the strains commonly grown. In Virginia during the past year fields grown from one of these selections produced from 90 to 100 bushels per acre, which was about one and one-half times the average yield in the community where the crop was grown.

"In Wisconsin the Department has developed a high-yielding early-maturing variety that produced last year during an unfavorable season 100 bushels to the acre.

"Breeding experiments have been started the present year in California, Nevada and Arizona to secure strains adapted to the peculiar conditions prevailing in those localities.

"The work in the improvement of sweet corn has been continued, and several high-yielding strains of excellent quality have been developed as the result of work in New York, on the Arlington Experimental Farm in Virginia, and elsewhere. . . .

"Pure Seed Investigations.—The pure-seed work has been extended during the past year by the establishment of testing laboratories in co-operation with the Nebraska Agricultural Experiment Station and the Missouri Agricultural Experiment Station. At the laboratory in Washington, D. C., a larger number of samples of seed have been tested for farmers and seedsmen than in previous years. As directed by Congress, forage-plant seeds have been secured from dealers and examined for the presence of adulterants. Many lots of Kentucky bluegrass and orchard-grass seed have been found to be adulterated, but the practice of adulteration has practically ceased with other forage-plant seeds.

"The efforts of this Department in encouraging the use of good seeds are being appreciated, and a reflection of this is seen in the fact that several of the larger seed houses have recently established private seed-testing laboratories. On account of the lack of instruction in technical seed testing in the agricultural colleges this Department has offered assistance along this line. So far a number of seedsmen, as well as state agricultural experiment station workers, have availed themselves of this opportunity. . . .

"Corn Breeding.—Corn-breeding methods have developed varieties whose yield is 15 to 25 per cent above that secured by the best of the former varieties. This Department has introduced from Guatemala for breeding purposes new types of corn adapted for growth in the moist Gulf regions and other varieties for growth in the hot arid regions. The development of quick-maturing, high-yielding dent corn for the northern edge of the corn belt has been accomplished by the experts of the Department.

"The corn plant is very pliable in the hands of skillful breeders. Ten generations of breeding at the Illinois station have increased the average

protein content from 10.92 per cent to 14.26 per cent, and also have decreased it to 8.64 per cent; the average oil content has been increased from 4.70 per cent to 7.37 per cent and diminished to 2.66 per cent.

"Seed-corn breeders' associations now exist in most of the states of the corn belt. Seed corn is now largely grown as a special crop. Pure strains are being developed, new varieties originated, and older ones improved. . . .

"Good varieties of wheat have been originated by breeding. The Minnesota station originated numerous varieties, two of which have spread over half a million acres, and yield from one to three bushels more per acre than the varieties formerly grown. The Maryland and Michigan stations bred new varieties of wheat, which are now grown in those states. The winter-wheat belt has been extended farther and farther north by sowing adapted varieties until it is now grown in regions which had before been regarded as incapable of growing it. Winter character has been added to the spring wheats of the Pacific coast and new hybrids of these wheats are now grown there.

"Methods of growing winter oats successfully in southern states have been developed of late by some of the southern experiment stations and varieties of oats adapted to winter culture have been distributed. The Wisconsin station improved the Swedish select oats and 5,000,000 bushels of this variety are now grown by Wisconsin farmers.

"The Minnesota station originated and disseminated a promising variety of flax for seed production, and the North Dakota station achieved great success in combating the wilt disease of flax by treating the seed and by developing resistant strains."

THE 1908 BEAN CROP.

With the field-bean harvest of 1908 nearly all thrashed and a large part of it in dealers' hands, fairly accurate information concerning the size of the crop has been obtainable. Orange Judd Farmer has received from the growers in principal field-bean states, notably Michigan and New York, data which indicate that the crop is a little short of normal. Much irregularity, however, is noted. In one state, and even one county, there are variations from half a normal yield to 25 per cent more than a full crop. Nearly all growers report that navy, red kidney, yellow eye and white beans are of excellent quality. Even in localities in which the bulk harvested was less than last year, the marketable beans will be greater in quantity because of their freedom from blemish.

In Michigan the yield to the acre has varied from eight to fifteen bushels. Eaton County, with a yield of eight to ten bushels to the acre, and a reduced acreage, has a fair harvest. Dry weather at picking time reduced the percentage of waste. Sanilac County reports a rather large crop, while in other counties the harvest is about the same as last year.

New York growers report a harvest of twenty-five bushels to the acre in some localities and in others twelve bushels. There is unanimity as to the quality, which is very good. Wisconsin, not so important in the field-bean growing industry, appears to have an average harvest.

Prices rule very firm. Nearly everywhere growers are receiving \$2 a bushel. The range is \$1.90 to \$2.10 for pea beans, and \$2.50 for yellow eyes. These prices indicate that the dealers concede the crop is somewhat less than normal. Quotations are higher than at this time last year, or, in fact, for three years previous. From 1901 to 1905, inclusive, \$2 to \$2.50 was the normal quotation for field beans. The years 1906 and 1907 brought declining prices. Reduced exports last year and increased imports, as indicated in the table

printed herewith, seem to prove that the home crop of field beans in 1907 was insufficient to meet the trade requirements.

A few extracts from reports of growers, and in some instances dealers who are quite as bullish as the farmers, may throw additional light on the field-bean market.

[Indiana Station Bulletin.] INSECTS INFESTING CLOVER SEED.

BY PROF. J. TROOP.

Early in September word was received at the Indiana Experiment Station from the northeastern part of the state, concerning certain insects which were said to be doing considerable injury to the clover seed crop. The first one of these reports came from Huntington County. It was not long, however, before reports began to come in from other counties and at the present time they are still coming, showing very conclusively that the greater portion of the clover-growing sections of the state have been visited.

The trouble was found to be due to the presence of one, and perhaps two, species of insects which are often found infesting the seed of the red, white, alsike and crimson clovers, and one of them, at least, also works on alfalfa. As the same trouble is likely to occur again next year, a brief description of the habits, and some suggestions concerning preventive measures which may be employed, are here given.

The two species indicated above are the clover-flower midge and the clover seed chalcis. Both are very small flies. The first is a near relative to the wheat midge, and resembles it quite closely, both in form and color. The other belongs to a parasitic family, the members of which usually feed them and destroy other insects. The species mentioned here, however, is an exception to the rule.

These two species, although belonging to different families, are often found together, and, as their habits and time of working are so nearly identical, they may be treated together. They may be found working together in the same head, but not in the same flower, as the midge appears a few days earlier than the chalcis, and its larvae feed upon and destroy the young ovules, thus precluding the presence of the other, which feeds only upon the growing seeds. In either case, however, the eggs are deposited in the head of the clover, but the midge places hers upon the forming florets and the young larvae make their own way into the ovaries, while the chalcis places her eggs directly into the already forming seeds, which the young larvae, as soon as hatched, proceed to hollow out by feeding upon the inside. This has been the condition of most of the seed sent to us this fall.

In this section there are two broods of each species in a season; the first brood of the midge appearing the latter part of May, and the second the last of July. The first brood of the chalcis fly appears the forepart of June and the second the last of July and first of August. In both cases the first brood attacks the first bloom, or hay crop, and the second the seed crop.

Practically the same remedies will apply to both species, so far as we now know. Early cutting of the clover hay crop as soon as it is in full bloom will destroy most of the larvae. This can be done where clover is grown alone for seed, and not mixed with timothy. Early cutting will also tend to hasten the blooming period of the seed crop, so that the blossoms will be too far advanced to receive much injury from the second brood, especially of the midge. Then, too, all volunteer clover should be clipped in the early stages of its blossoming period. Fall plowing the clover field for corn the next spring is also a good practice.

These two species, like the most of our insect enemies, have parasitic enemies which feed upon them, and which contribute very largely toward holding them in check. However, it is not well to depend upon these entirely, as it sometimes

requires a couple of years for the parasites to develop in sufficient numbers to be able to make themselves felt. In the meantime these species will, in all probability, continue to increase, so that, for another year, at least, it will be well to practice early cutting.

The clover seed chalcis winters as a larva or pupa inside the seed, and will emerge from the seed stored in the barn, according to Professor Folsom of Urbana, Ill. The larva will continue to work, therefore, in stored seed, until it has reached its pupa stage. The proper treatment of the seed, therefore, which has been stored for the winter, would be to place the sacks in a tight box or bin—it should be air tight, if possible—and then treat it with carbon bisulphide by placing open dishes, filled with the material, on the sacks and then closing the bin and leaving it for a couple of days. A half pound would be sufficient for ten or fifteen bushels.

DECISION ON NEBRASKA CROPPER'S CONTRACT.

The District Court of Douglas County, Nebraska, has recently decided an important seed case. An action in replevin was brought by the J. C. Robinson Seed Company of Waterloo, Neb., against John Hamilton, J. E. Hiveley, the Citizens' State Bank of Waterloo, Neb., and its cashier, H. B. Waldron. The defendant, John Hamilton, had grown a crop of Stowell's Evergreen Sweet Corn on land owned by Mrs. Mary T. Robinson and which she had leased to the J. C. Robinson Seed Company. Hamilton went on the farm under a contract with the seed company, wherein he agreed to do all the work, harvest and deliver the crop to the seed company at Waterloo; and he was to receive as compensation for his services such sum as three-fifths of the marketable corn grown would bring at a stipulated price per hundred pounds. The contract also provided that the title to the corn should be at all times in the seed company.

After the corn was shelled, Hamilton sold three-fifths of the same to the defendant Hiveley, and gave a chattel mortgage on the corn he sold to H. B. Waldron and the Bank. The other two-fifths of the corn was delivered by Hamilton to the Seed Company. The three-fifths of the corn sold by Hamilton was taken possession of under the writ of replevin and at the trial the court held: That the agreement between Hamilton and the Seed Company constituted a cropper's contract; that the relation between the parties thereto was that of master and servant; that Hamilton had no right to sell the corn or mortgage the same; and that the purchaser and mortgagee got no title or lien on the corn.

At the close of all the testimony for both sides, the court directed the jury to return a verdict in favor of the J. C. Robinson Seed Company. This case is vitally important to the seed men of Nebraska, for there has been an impression, owing to some former decisions, that contracts like the one involved in this suit were not valid in that state. In this trial the court entirely repudiated such claim and held such contracts to be absolutely valid and enforceable.

STATE SEED TESTING STATIONS.

There is maintained in connection with the Nebraska Experiment Station a seed laboratory conducted in co-operation with the U. S. Department of Agriculture. This laboratory is in position to determine the per cent of germination and purity of any sample of seed sent to the laboratory. There is no charge made for this service. We are sure the reader will appreciate that this service will prove of immense value to seedsmen and farmers as well.

A seed-testing laboratory has just been provided for the Department of Agronomy of the University of Missouri by the United States Department of Agriculture for the testing of all kinds of seeds sold by the seedmen and used by the farmers of that state. The samples are carefully

examined in the laboratory, compared with other types and then planted in germinating pots and the growth carefully watched. A complete report is then made to the sender, who is advised whether or not this seed is worth his further consideration.

THE FLAX SEED CROP.

Flax continues to show a tendency to concentrate in the Northwest, although within that region it has been shifting about, moving particularly toward the North and West. The Dakotas lead in production. The year showed some decline in acreage and also a decline in the yield, which was below normal. The following statement shows the estimated acreage and production of flax by states by the Orange Judd Farmer:

	Acres.	Per Acre.	Bushels.
Wis.	31,000	10.0	310,000
Minn.	480,000	9.7	4,656,000
Ia.	30,000	9.0	270,000
Mo.	25,000	9.1	228,000
Kan.	50,000	7.0	350,000
Neb.	15,000	10.0	150,000
N. D.	1,950,000	8.4	16,380,000
S. D.	502,000	10.1	5,070,000
Other	110,000	11.0	1,210,000
Total	3,193,000	8.9	28,624,000

EUROPEAN CLOVER AND GRASS SEEDS.

R. Liefmann Söhne Nachf., Hamburg, in their November report on clover and grass seeds say that the fall weather has been most favorable to the red clover crop; and they now estimate the results (which we brief) as follows: Austria-Hungary, below a medium crop; Italy, somewhat below medium; Russia, good yield in the north and central sections, with complaint in the south; Poland, ample for home needs; Germany, best crop for many years; England, imports will doubtless be confined to narrow limits; Belgium and Holland, crop above an average; France, a record crop, seemingly sufficient to supply the whole globe with red clover. "We have advised our friends to use the greatest caution in buying red and not to look at the article unless values are very low."

Alfalfa.—France, we are looking for decidedly a bad crop; Italy has a moderate crop, decidedly smaller than last year's; Russia-Turkestan harvested a crop below normal and large quantities of the new seed will not be available in Hamburg until in January and February. "Alfalfa in our opinion must show a rapid tendency to rise all through the season."

White Clover.—Generally speaking, the quantity of the crop has turned out better than we anticipated.

Alsike.—A very large crop of beautiful quality.

Timothy.—Our crop is reported to have been scarcely a medium crop.

Orchard Grass.—Light crop; the prices seem likely to be maintained notwithstanding the fact that they are very high.

THE NATIONAL CORN SHOW.

The great Exposition event of the month of December and indeed of the year is the Second National Corn Exposition at Omaha, now in progress and closing on December 19. It is given by the people of Omaha, under the direction and management and for the benefit of the National Corn Association.

It will hardly be necessary here at this time to dwell on the particulars of this event, which must by now be familiar to all interested in seed production along the lines of the cereals and grasses, samples of which are on exhibition from all the states of the Union. This day, December 15, is "Grain Dealers' Day," when there will be present special delegations from the Merchants' Exchange of St. Louis and Board of Trade of Chicago, who went out by special trains. The program is a special one, as follows:

10:30 A. M.—General Reception on the Floor of the Omaha Grain Exchange.

2:00 P. M. (Creighton Hall, Fifteenth and Harvey Streets)—Music.

Address—Gurdon W. Wattles, President National Corn Exposition.

Address—J. A. Tiedeman, President Grain Dealers' Association, Sioux City, Iowa.

Address—"Improvement of the Oat Crop," Prof. M. L. Bowman, Farm Crops Department, Iowa State College of Agriculture, Ames, Iowa.

Address—"The Relative Value of Good and Poor Oats to the Cereal Miller," J. C. Murray, Manager Grain Department, The Quaker Oats Co., Chicago, Ill.

Illustrated Lecture—"Oat Breeding," T. R. Garton, Warrington, England.

The special days for the remainder of the Exposition are as follows:

Wednesday and Thursday, December 16 and 17.—Implement Dealers.

Friday, December 18.—Country Life Commission and the Press.

Saturday, December 19.—Ak-Sar-Ben Day.

NOTES.

The Fredonia Seed Co. has been incorporated at Fredonia, N. Y.

Everett B. Clark Seed Co. will erect a seed warehouse at Green Bay, Wis. They are now making contracts for growing peas.

The Harvey Seed Co. has been incorporated at Montgomery, Ala., taking over the business of A. R. & B. H. Harvey and P. O. Fransow.

C. O. Nichols and O. V. Sherpy expect to erect a seed warehouse at Northfield, Minn., to handle seed corn. The capacity will be 6,000 bushels.

The Albert Dickinson Seed Co. has just completed a new storage house for corn at its elevators at Twenty-fourth Avenue Southeast and Elm Street, Minneapolis.

A seed store in New York has grass plots shipped daily from Jersey City. The plots consist of shallow boxes filled with earth, in which the grass is grown. The plots are sold by the foot.

The Castle Dale Seed House, Castle Dale, Utah, are handling the lucerne of Emery County, expected to run about nine carloads. The farmers are paid from 10½ to 11½ cents per pound. One man's crop brought \$4,800.

Northrup, King & Co., seedmen, and the Northern Seed Company, who recently opened a branch house in Elbow Lake, Minn., have obtained large quantities of seed, especially corn, grown in that neighborhood under contract.

McKay, Reece & Co., Nashville, Tenn., say farmers of that state have been buying seed wheat and are sowing as fast as they can break up the hard soil. A noticeable fact is that the demand is almost exclusively for the best seed wheat that can be had. Formerly cheaper kinds would sell, but now nothing will do but the best, regardless of price.

Ames-Brooks of Duluth have found it profitable to import flaxseed and oats from Manitoba, and on December 7 they paid a duty of 25 cents per bushel on a small lot of flaxseed and sold the shipment in Duluth at a profit. At the same time they imported oats on which a duty of 15 cents a bushel was imposed. The volume involved in these transactions did not amount to much, but it disclosed a very strong grain situation in the United States.

William Saunders, director-general of the Dominion Experimental Farms, announces that under the instruction of the Minister of Agriculture a distribution is being made this season of samples of seed grain and potatoes to Canadian farmers for the improvement of seed. The stock for distribution has been secured mainly from the experimental farms at Indian Head, Sask., and Brandon, Man. The samples consist of oats, spring wheat, barley, peas, Indian corn (for ensilage only) and potatoes. The quantity of oats is four pounds, and of wheat or barley five pounds, sufficient in each case to sow one-twentieth of an acre. The samples of Indian corn, peas and potatoes weigh three pounds each.

ELEVATOR AND GRAIN NEWS

ILLINOIS.

The Ivesdale Grain Co. is building an office at Ivesdale, Ill.

Steps are being taken to organize a farmers' elevator company at Palmer, Ill.

Alvin Kaminky has purchased the Taylor Elevator at Earlville, Ill., and will operate it.

The Armour Grain Co. has taken over the Santa Fé Elevator at Chicago and will operate it.

The new 20,000-bushel elevator of the Washington Milling Co. at Washington, Ill., is about completed.

It is expected that the new Farmers' Elevator at Mason City, Ill., will be ready to receive grain by January 1.

Benjamin A. Neal has sold his elevator at Taylorville, Ill., to H. N. Schuyler, the consideration being \$8,000.

A movement is on foot among the farmers around St. David, Ill., to establish a grain elevator at that place.

The new Delaney Elevator at Niantic, Ill., is nearing completion. Considerable machinery has already been installed.

H. A. Hillmer & Co. of Freeport, Ill., commenced operating the Myers elevator at Florence Station, Ill., on December 1.

Graham & Co. have purchased an old warehouse building at Florence Station, Ill., and are remodeling it into a grain elevator.

E. D. Risser, H. H. Troup and E. E. Rollins have incorporated the Waldron Grain Co. of Kankakee, Ill., with a capital stock of \$6,000.

McFadden & Co. of Havana, Ill., are tearing down their old elevator at Teheran, Ill., preparatory to putting up a new 20,000-bushel house.

W. C. Charles, Byron C. Herber and E. M. Herber have incorporated the Three States Hay and Grain Co. of Cairo, Ill., with a capital stock of \$2,500.

The New Holland Grain Co., recently incorporated for \$10,000, is building an elevator at New Holland, Ill., to replace the one recently destroyed by fire.

W. W. Schnmacher has purchased the elevator at Romeo, Ill., and opened the house for business.

John W. Shirley of Centralia has purchased the elevator at Clements, Ill.

The Litchfield Farmers' Grain and Live Stock Co. of Litchfield, Ill., has been incorporated with a capital stock of \$15,000 by Fritz Monke, L. J. M. Whitehouse and H. G. Whitehouse.

The Farmers' Grain Co. of Dalton City, Ill., recently incorporated with a capital stock of \$12,000, has sold its two elevators to C. A. Hight & Co. of Dalton City, for a consideration of \$15,000.

Warren Speicher has commenced the construction of a new elevator at Urbana, Ill. The house will be located near the Big Four right-of-way and will measure 40x60 feet and be 60 feet in height.

The recently incorporated Cisco Grain Co. has purchased the 40,000-bushel elevator of F. S. Weilepp at Cisco, Ill. The consideration was \$13,000. C. N. Weilepp has been installed as manager of the house.

Samuel D. Holderman has purchased the property of the Seneca Grain, Lumber and Supply Co. at Seneca, Ill. The consideration was \$20,000. The Seneca Grain and Lumber Co. was organized by the farmers about Seneca, but mismanagement and heavy losses resulting therefrom prompted the owners to dispose of the property.

The Tallula Farmers' Elevator Co. has decided to build an elevator at Tallula, Ill. The officers of the company are C. C. Judy, president, and C. C. Juhl, secretary and treasurer. The Burrell Engineering and Construction Co. of Chicago has obtained the contract for the erection of the elevator and construction work has been started.

IOWA.

A new elevator is being erected at Sheffield, Iowa.

C. M. Herrig recently installed a new scale in his elevator at Wall Lake, Iowa.

The Stockdale-Dietz Elevator Co. is building an addition to its plant at Cloverdale, Iowa.

An elevator company has been organized at Coin, Iowa, with a capital stock of \$3,000.

The Atlantic Mill & Elevator Co. of Atlantic, Iowa, is erecting a storehouse at Gates, Iowa.

Eli Messer has completed his new grain storage house near Traer, Iowa. The building measures

26x40 feet and is 16 feet high, standing on a cement foundation.

Emil and August Leo have purchased the Druley-Leo grain business at Huntington, Iowa.

The Farmers' Elevator and Supply Co. has purchased the business of Willfong & Gates at Alta, Iowa.

C. L. Kinney has leased the Froning Elevator at Grundy Centre, Iowa, for another three-year period.

John Schuett of Oneida, Iowa, has purchased one of the elevators owned by Duncan & Kessler of Dysart, Iowa.

The Decorah Farmers' Co-Operative Society of Decorah, Iowa, has been incorporated with a capital stock of \$20,000.

New automatic grain scales have recently been installed at Hampton, Iowa, at the elevators of the Moore Bros. Grain Co. and Jacob Pohl.

The Cavers Elevator at Council Bluffs, Iowa, is being remodeled. The new capacity will be 80,000 bushels, double the former capacity.

W. H. Taylor & Co. of Rnnnels, Iowa, have opened a branch grain office at What Cheer, Iowa, and installed W. H. Johnston as agent.

Charles Howsen has disposed of his elevator at De Witt, Iowa, to M. Phelps and T. M. Collipriest. Mr. Collipriest has taken charge of the business.

The Updike Grain Co. of Omaha, Neb., has purchased the elevators of the J. H. Hamilton Co. at Modale, Mondamin and Blencoe, all in Iowa.

C. N. Ogden of Bloomfield, Neb., has purchased the Knudson Elevator at Akron, Iowa, and removed to the latter town, which is his former home.

Taylor Bros. have purchased the grain business of Davis & May at Ford, Iowa. The new proprietors have commenced the construction of a new elevator at that point.

A. D. Hayes of New London, Iowa, has added a fourth elevator to his line of houses in Iowa by purchasing the elevator of A. W. Hookum at Mt. Union. The consideration given is \$4,500.

The Commercial Club and the Board of Trade of Sioux City, Iowa, have been agitating the building of a new elevator in that city. The present elevator capacity at Sioux City is only 400,000 bushels.

The elevator of the Nebraska-Iowa Grain Co. at Farragnt, Iowa, has recently undergone several improvements. The old steam engine has been replaced by a new gasoline engine and new steel scales have been installed.

The Droege-Kiddle Co. at Council Bluffs, Iowa, has been dissolved, Wm. C. and Henry F. Droege taking over the stock of E. J. Kiddle and F. L. Dougherty. The business will be carried on in the future under the style of the Droege Elevator Co.

The foundations of the big B. & M. Elevator at Burlington, Iowa, have begun to sag and the structure is settling on the river side. In order to remedy this defect the Burlington Route has jacked up the east side of the elevator and will put a concrete foundation under it.

The Rothschild Grain Co., which lost its large elevator at Davenport, Iowa, by fire on October 14, has leased the old Hawkeye Elevator in that city. The Rothschild Co. has taken over the lease owned by D. Stuhr and the Interior Grain Co., which still has two years and a half to run.

THE DAKOTAS.

Hiram Kipp is building a new elevator at Aberdeen, S. D.

The McClure Elevator at Hunter, N. D., is to be torn down.

It is reported that two elevators are being erected at Valen, N. D.

A movement is on foot to establish a farmers' elevator at White Lake, S. D.

The Bagley Elevator at Buffalo Springs, N. D., has been completed and put in operation.

The Abercrombie (N. D.) Elevator will be enlarged to accommodate increasing business.

A new power house has been added to the equipment of the elevator at Stockholm, S. D.

The Bagley Elevator Co. has commenced construction work on its new house at Bucyrus, N. D.

A new town has been laid out between Huron and Wolsey, S. D. Grain elevators have already been erected.

The Farmers' Elevator at Carthage, S. D., is nearly completed and Manager Porter has assumed charge.

J. J. Peters has disposed of his elevator at Wellsburg, Iowa, to his brother, Anno Peters, and has purchased an elevator at Crete, N. D., removing to the latter place.

The Bismarck Elevator and Investment Co. is building a 21,000-bushel grain warehouse at Expansion, N. D.

The new elevator of W. C. Gemmill at Canton, S. D., which replaces the one destroyed by fire on October 2, has been completed.

The Enderlin Farmers' Elevator Co. has purchased the Loomis Elevator at Enderlin, N. D., and will run it in connection with its other house at that point.

The five elevators at Glen Ullin, N. D., to which town the latest census gives a population of 545, have handled over 300,000 bushels of grain so far this season.

The new 60,000-bushel elevator of the Equity Elevator Co. at New Rockford, N. D., has been completed and is now open for business with N. C. Gunvaldsen as agent.

Wallace Wright has recently completed on his farm near Wakonda, S. D., what is believed to be the largest private grain elevator in the state. The elevator is of 12,000 bushels' capacity and contains a stock feed mill.

The Heaton Farmers' Elevator Co., which recently purchased an elevator at Heaton, N. D., has been incorporated with a capital stock of \$25,000. The incorporators are C. E. Harding, Prosper St. Jacqne and William Hay.

MISSOURI, KANSAS AND NEBRASKA.

A new elevator is being put up at Milligan, Neb.

A new grain elevator is being built at Ogallala, Neb.

M. C. Boyle has acquired the elevator at Lindsey, Kan.

Samuel Kent, Jr., has completed his new elevator near Norfolk, Neb.

J. R. Sparling, of Iantha, Mo., has purchased a Hall Signaling Grain Distribntor.

The new firm of W. T. Shute & Co., grain dealers, have commenced business at Wichita, Kan.

The Farmers' Elevator at Saksman, Kan., has been leased by the Central Kansas Milling Co. of Lyons, Kan.

The Trans-Mississippi Grain Co. has ordered a Hall Signaling Grain Distribntor for its elevator at Brnle, Neb.

O. Carlson is overhauling and remodeling his elevator at Mead, Neh. A new gasoline engine is being installed.

The Lakeside Milling and Elevator Co. is planning to build an elevator at Emporia, Kan., in the near future.

The Essmueller Mill Fnrrishing Co. have installed a Hall Signalling Grain Distribntor in their plant at St. Louis, Mo.

B. C. Empfield has purchased of Isaac Clark the old grist mill at Anselmo, Neh., and will convert it into an elevator.

John M. Black has taken possession of the elevator of Geo. E. Ott at Lebo, Kan., which he purchased some time ago.

The P. H. Pelke Construction Co. will install the new Hall Grain Distributing System in the elevator at Lindsborg, Kan.

J. H. Lynds has completed his new elevator at Highland, Kan., and commenced the erection of another elevator in a nearby town.

G. H. Birchard of Lincoln, Neh., has received the contract for building a 10,000-bushel elevator for John H. Lynds at Ratcliff, Kan.

G. H. Birchard of Lincoln, Neh., is remodeling the elevator of George Sconlar at Lovewell, Kan., and installing a cleaner and sheller.

Fred K. Barrett of Marysville, Kan., has bought the W. F. Peacock grain elevator and cribs at Blue Rapids, Kan., the purchase price being \$4,500.

The Passaic (Mo.) Elevator Co. has been incorporated with \$5,000 capital stock by Max Weiner, W. W. Cannon, R. H. Groves and others.

The Beal-Vincent Grain Co. has been incorporated at Omaha, Neb., with a capital stock of \$25,000. The directors are Cnther Vincent and Rudolph Beal.

George Sconlar has awarded the contract for his new 10,000-bushel elevator at Webber, Kan., to G. H. Birchard of Lincoln, Kan. The elevator will be equipped with a Fairbanks' gasoline engine and scales, Victor Sheller and B. S. Constant Corn Cleaner.

The Lincoln Grain Co. has awarded the contract for their new 22,000-bushel elevator at Waverly, Neh., to G. H. Birchard of Lincoln, Neh. The elevator will be built on a heavy concrete foundation, with the entire basement paved with concrete and the building covered with galvanized steel. The engine room and office will be twenty feet from the main building and will be constructed of reinforced concrete and entirely

fireproof. The equipment of the elevator will include a gasoline engine, Fairbanks wagon and hopper scales, No. 34 Barnard & Leas Separator, and a passenger elevator.

The T. H. Bunch Co. of Little Rock, Ark., have moved their branch office at Holton, Kan., to Marysville, Kan. Manager Frank Geoffrey has located permanently at Marysville.

MINNESOTA AND WISCONSIN.

A farmers' elevator is being agitated at Silver Lake, Minn.

The N. J. Olson Co. is building an elevator at Moorhead, Minn.

The old Andrews & Gage Elevator at Wadena, Minn., has been closed.

A farmers' co-operative elevator company is being formed at Torah, Minn.

The Dakota Elevator Co. is erecting an addition to its plant at Osseo, Minn.

The new elevator of the Peterson Produce Co. at Embarrass, Wis., is about completed.

An addition, measuring 34x44 feet is being built at the Kasota Cereal Elevator, Kasota, Minn.

Everett, Aughenbaugh & Co. are erecting a 3,000-bushel steel elevator at Waseca, Minn.

The Eagle Roller Mill Co. is contemplating the erection of a large elevator at New Ulm, Minn.

The Farmers' Co-operative Elevator Co. of Tomah, Wis., has incorporated with a capital stock of \$6,000.

The Roberts society of the A. S. of E. is considering the proposition to build an elevator at Roberts, Wis.

The St. John Grain Co. has applied for permission to erect a 32x32-foot elevator, sixty feet high, at Le Sueur, Minn.

The new 100,000-bushel elevator of the Tileston Milling Co. at St. Cloud, Minn., has been completed and is receiving grain.

The Hanson & Barzen Milling Co. of Thief River Falls, Minn., has started construction work on an elevator at Badger, Minn.

Evan Oie and L. O. Peterson have commenced the erection of an elevator on the Great Northern right-of-way at Roseau, Minn.

The Watertown Grain Co. has reopened its barley elevator at Watertown, Wis., after making a number of repairs and alterations.

Charles L. Boudrye has purchased the elevator of Wolf, Wells & Co. at Granada, Minn., and will operate a feed mill in connection.

George G. S. Campbell has finished the rebuilding of his elevator at Alexandria, Minn. The house has been put up on a new site.

Railroad detectives recently apprehended three wheat thieves in the Northern Pacific yards at Brainerd, Minn. The court imposed fines, which were paid.

J. P. Coffey has again acquired the elevator and warehouse of Charles Loveland at Ellsworth, Minn. Mr. Coffey sold the same elevator to Mr. Loveland last spring.

Frank Sugden has leased his elevator at Stewart, Minn., to E. M. Hanson for the remainder of the season. Poor health has made it necessary for Mr. Sugden to retire from business for a time.

OHIO, INDIANA AND MICHIGAN.

Henry Smith has purchased the elevator at Foster, Ind.

Frank Weber is building an elevator at St. Marks, near Tell City, Ind.

Crane & Crane have finished their new elevator at Eaton Rapids, Mich., and put it in operation.

Leas & Leas recently built an additional grain dump in connection with their elevator at West Manchester, Ohio.

John Troyer, with his two sons, Clarence and Isaac Troyer, has purchased the elevator of the Middlebury Grain Co. at Middlebury, Ind.

The Ver Hage Milling Co. of Zeeland, Mich., has formed a new stock company in that town for the purpose of building an elevator and warehouse.

The C. B. & C. Railroad is planning to build a grain elevator at Uniondale, Ind., to take care of the business formerly handled by the Davidson Elevator, which burned a short time ago.

The A. Waller Co. of Henderson, Ky., has contracted for the erection of a new elevator at McGary, Ind. The new Waller Elevator at Kings, Ind., has been finished and opened for business.

Two of the flour milling companies of Evansville, Ind., the Akin-Erskine Co. and Inglehart Bros., have each recently erected a 60,000-bushel steel wheat storage tank in that city. The ad-

dition of these two tanks brings the total wheat storage capacity of Evansville up to 600,000 bushels.

The wreckage of the recently burned Bartlett-Kuhn Elevator at Vincennes, Ind., is being cleared away preparatory to erecting a larger house. The firm is already buying corn at Vincennes, unloading directly into cars.

J. F. Collins and J. O. Herron have purchased a half interest in the West Elevator at Markle, Ind., formerly owned by Woodbury & Files. The new firm will operate the elevator under the style of the Woodbury & Elliott Grain Co.

Weber & Purviance have let the contract for their new 25,000-bushel elevator at Huntington, Ind., to the Reliance Construction Co. of Indianapolis, Ind. The house will measure 50x36 feet and go up seventy feet in the air. A cob house and dust room will be built in addition.

The Chelsea Elevator Co. has recently made a number of improvements in its house at Chelsea, Mich. The building has been thoroughly renovated, new bins put in and an electric motor installed to furnish power for the entire plant. The company was recently incorporated under the laws of the state with a capital stock of \$3,000.

CANADIAN.

The C. F. Haley Elevator Co. has commenced business at Minto, Man.

Neil Cameron & Co. have opened their new elevator at Basswood, Man.

The North Star Elevator Co. has completed its elevator at Perdue, Sask.

The Crown Elevator Co. has finished its 40,000-bushel house at Pense, Sask.

The Winnipeg Elevator Co. has completed a new elevator at Wilkie, Sask.

The Canadian Elevator Co. has erected a 30,000-bushel elevator at Scott, Sask.

The new government elevator at Port Colborne, Ont., is now nearly completed.

The old elevator at Red Deer, Alta., has been leased to the Alberta Pacific Elevator Co.

The new elevators of the Wilson-Leslie Co. at Chamberlain and Cory, Sask., have been completed.

The Notre Dame De Lourdes (Man.) Farmers' Elevator Co. has received letters patent of incorporation with a capital stock of \$7,500.

Muirhead, Black & Co. have sold their elevator property in Fort William, Ont., to J. L. Davidson. The consideration named is \$50,000.

The Northern Elevator Co. and the Canadian Elevator Co. have each selected sites at Leslie, Sask., and will shortly construct elevators at that point.

Stoughton, Sask., is facing a car famine. With the elevators all full and no more cars, the farmers in that section are obliged to hold up on shipments.

The Hadley-Shaw Milling Co. is erecting a transfer elevator at Thorold, Ont., for the purpose of transferring grain from the cars into their Welland Mills at that point.

The Thunder Bay Elevator Co. of Winnipeg, Man., has been incorporated with a capital stock of \$1,000,000. The provisional directors include J. J. Fisher, S. M. Battam and C. S. Blanchard.

Final arrangements are being made for the construction of the Canadian Elevator Co.'s 1,500,000-bushel elevator at Port Arthur, Ont. The cost of the elevator will be in the neighborhood of half a million dollars.

At Guernsey, Sask., the four new elevators started this fall are now completed. The Western Elevator Co. and the Lake of the Woods Milling Co. were the first to build. A. E. Little has built a house of 40,000 bushels' capacity, and the Saskatchewan Elevator Co. one of 30,000 bushels' capacity.

SOUTHERN AND SOUTHWESTERN.

E. Strong is building an elevator near Tallega, Ky.

The Crouch-Pool Grain Co. is planning on building a large grain elevator at Fort Worth, Texas.

The Zliak-Shafer Milling Co. will shortly begin the construction of a grain elevator at Mobile, Ala.

The Cincinnati Grain Co. has purchased a Hall Signaling Grain Distributor for its plant at Latonia, Ky.

Construction work has commenced on the new 25,000-bushel elevator of the Pond Creek Milling Co. at Alex, Okla.

Light shipments of grain from the West may make it advisable to close the big C. & O. Elevator at Newport News, Va. As yet the officials

of the company have not decided upon definite action.

It is reported that the Terminal Grain and Elevator Co. will establish a 65,000-bushel elevator at Fort Worth, Texas, to cost about \$30,000.

Thomas Dodson has recently completed a new grain house at Lebanon, Tenn. The building measures 50x200 feet and is 20 feet in height.

There are prospects for a new grain elevator at Montgomery, Ala. The finance committee of that city have taken the matter under advisement.

The Granite (Okla.) Grain Co. has been incorporated with \$10,000 capital stock by H. C. Oaks, A. G. Herenden, H. E. Curry and G. M. Curry.

The National Hay, Grain & Storage Co. has been incorporated at Macon, Ga., with \$20,000 capital stock by G. G. Toole, A. Block and N. M. Block.

C. C. Watchman, L. W. Mathews and R. A. Dunlap have incorporated the Great Western Hay and Grain Co. of Vera, Okla., with a capital stock of \$10,000.

The Eureka Springs (Ark.) Grain Co. has been chartered by the Arkansas Secretary of State. The capital stock is \$3,500. H. I. Seidel is president of the company.

The entire line of concrete grain storage bins at Canton, a suburb of Baltimore, Md., thirty-six in all, have been finished by the Pennsylvania Railroad. Ten of these bins were put in operation some time ago, as noted in our October issue, and work has been rushed on the remaining twenty-six. The bins are built in connection with Elevator No. 3 and will give Canton a total grain storage capacity of 2,500,000 bushels. The additional capacity has been sadly needed by the Baltimore grain trade.

WESTERN.

It is reported that Thomas R. Murray will build an elevator at Moccasin, Mont.

Miller Bros. are making some important additions to their elevator at Rexburg, Utah.

The Jones & Scott Grain Co. of Walla Walla, Wash., has increased its capital stock to \$50,000.

Bradshaw & White report from Weiser, Idaho, that the grain and seed business in that vicinity is better this year than ever before.

The Blackfoot Grain and Produce Co. of Blackfoot, Idaho, has been incorporated with a capital stock of \$50,000 by J. K. Mullen, H. E. Johnson and T. J. Hubbell.

William Bell, W. H. Bell, Paul Goodline and Joseph Walters have incorporated the Clarkston Grain Cleaning and Grinding Co. of Clarkston, Colo., with a capital stock of \$5,000.

Cracksmen recently visited the office of W. H. Kenworthy & Sons, grain dealers of Tacoma, Wash., and demolished the safe, obtaining about \$325 in cash and some valuable papers. No trace of them has been found.

G. H. Birchard, the elevator builder of Lincoln, Neb., has recently completed three elevators in Idaho, at Kimberley, Filer and Ashton, and is now engaged in remodeling elevators at Rexburg, Sugar City and St. Anthony, all in Idaho.

P. A. McGregor of Minneapolis recently made a trip through southern Montana with a view to establishing an elevator to handle the grain output of the Ruby, Jefferson and Beaverhead valleys. The exact location of the proposed elevator has not yet been determined.

Plans are now being completed for the new grain elevator and warehouse to be erected at the waterfront terminus of the Chicago, Milwaukee & St. Paul extension at Tacoma, Wash., for Balfour, Guthrie & Co. It is the intention to have the building, which will be the largest grain house on the Pacific Coast, ready for use next fall.

EASTERN.

Frank Dianto has transferred his grain business from S. Braintree, Mass., to Randolph, Mass.

The new grain elevator at Riverpoint, R. I., has been completed and opened for business.

The J. F. Stapleton Grain Co. of Roslyn, L. I., has been incorporated under the laws of New York.

Ames & Co., grain dealers at Peabody, Mass., have moved into larger and better quarters in that town.

The annual meeting of the Consolidated Elevator Co. was held in New York City on December 15.

Merrill, Runnels & Mayo are building a new grain elevator at Waterville, Me., to handle their increasing business.

W. G. Swan and Josiah Babcock, Jr., have purchased the grain business of Daniel Gannett at Milton Lower Mills, Mass. Mr. Gannett has retired after a continuous service of fifty-four years.

in the grain business. For the last forty-eight years Mr. Gannett has been sole proprietor of the business.

D. M. McLane has purchased the interest of his partner, C. D. Gray, in their grain business at Wheelock, Vt., and will continue the business alone.

The Floyd-Campbell Co. of Clintondale, N. Y., has been incorporated to do a general grain business. The incorporators are R. D. Floyd, Pearl T. Campbell and Chas H. Pennoyer. The capital stock amounts to \$15,000.

The Taunton Grain Co. has recently instituted a number of decided improvements in its plant at Weir, Mass. The two buildings were moved from their old location to a new site and placed on high foundations, giving them an additional height of one story. Between these two buildings the company has commenced to build a modern elevator, which will be rushed to completion.

[For the "American Elevator and Grain Trade."]

OHIO NEWS.

BY H. L. SPOHN.

According to the monthly crop report, Ohio wheat made a small gain. The estimated condition is placed at 60 now, as against 56 last month. There is still much apprehension as to the final outcome, and markets are being affected by the condition. The area sown this fall is only 76 per cent of last year's area, or about 1,446,000 acres. A year ago the estimated condition was 80, which was increased to 94 the following June, when there was harvested about 30,000,000 bushels. About 44 per cent of this was marketed soon after it was thrashed, and much of the remainder remains in first hands. There has been little doing in wheat at Toledo for some time. Exporting has been impossible, and of the receipts which have come in most all was taken by the local mills. There are now on hand approximately 575,000 bushels, and the supply is gradually accumulating, as there seems to be little outside demand under existing conditions. The question of sowing spring wheat is being agitated to make up for the deficiency in the fall wheat acreage, and it seems probable that considerable of the spring variety will be planted next year.

A fair volume of corn is moving, farmers taking advantage of the present high prices to secure funds to meet the heavy holiday expense. The quality is exceptionally good, much of it grading No. 2 Yellow, and practically none below contract. As a result of the present cold snap, the moisture tests are expected to improve considerably.

Reynolds Brothers, one of the oldest grain firms in this section, have retired from the business, in order to devote more time to numerous other financial interests. The firm was established in 1869, the original organizers being the three brothers, S. C., W. B. and W. R. Reynolds. Later, owing to the death of two of the brothers, the firm was reorganized by S. C. Reynolds, his son, Fred J. Reynolds, and C. L. Reynolds. For many years the firm was engaged in the milling business, but for a long time all three members have been familiar figures on the floor of the local exchange. The Reynolds brothers were at one time considered the corn kings of the United States, and during the year 1885 they handled 85,000 carloads of grain, more than any other firm doing business in this country. The Reynolds have heavy banking and railway interests which demand their personal attention.

A. Mennell of Toledo, president of the Isaac Harter Milling Co. of Fostoria, was recently compelled to undergo an operation for appendicitis, at Robinwood Hospital. He survived the ordeal in good shape, and is now on the road to recovery. He is expected to be able to leave the hospital in a short time.

Bert Lockwood of Port Clinton is a disciple of the theory that "necessity is the mother of invention." While the neighbors sat around waiting for rain to dampen the corn shocks so as to make husking possible, Lockwood filled the tank of his fruit sprayer with water, and proceeded to moisten them himself. The result proved highly satisfactory, as he was through husking before his neighbors began.

A corn show will be held at Bellefontaine, Ohio, during the last week in December. An interesting program has been prepared, a feature of which will be a dinner of corn products, with corn-fed stock and poultry.

George H. Price, who was engaged in the grain business as dealer and buyer for more than forty years, died at his home in Toledo last week. He was a native of England, born at London, in 1846. He located in Toledo about 1865, and at once engaged in the grain business with Bangs & Walker. When they retired he became buyer for Quale & Co., and for the past 15 years has filled a similar position with A. W. Colton Company. He leaves a wife and two daughters.

THE EXCHANGES

The Exchange floor in the new Sioux City Grain Exchange at Sioux City, Iowa, has been completed and equipped with all the necessary paraphernalia for a cash grain market.

The members of the Pittsburg Grain and Flour Exchange gave a minstrel show on November 24, all the performers being members of the Exchange. The show was a howling success and more has been promised in the future.

Chicago Board of Trade men are largely interested in a proposed independent telegraph company to operate between Chicago, St. Louis and Kansas City. The company is to be known as the People's Mutual Telegraph Company.

A special board of trade building is being agitated by the grain men of Wichita, Kan. With something like fifty grain firms operating in the city and the milling industry growing constantly, the need of a special building is becoming more pressing every day.

Frank M. Bunch, William N. Eckhardt, Adolph Gerstenberg, Ed Andrew, J. C. Murray, S. P. Arnot and William S. Booth have been named by President Sager to represent the Chicago Board of Trade at the National Corn Exposition at Omaha, December 9 to 19, inclusive.

The Board of Directors of the Minneapolis Chamber of Commerce are considering the proposition of erecting a ten-story addition to their present property on Fourth Street, Minneapolis. A new heating extension will be built at once, so constructed as to be able to support ten additional stories above the basement, when the time for such addition comes.

The new oats pit of the Minneapolis Chamber of Commerce was opened for business on November 23. Following a little bit of pleasantries on the part of the members, the first official trade was made in the pit. H. F. Douglas, of the Great Western Elevator Co., and president of the Chamber, bid 49 cents for May oats, and F. H. Hallet promptly filled him up, selling 5,000 bushels.

The Chicago Board of Trade authorities are making an active investigation of the false report issued on December 3 purporting to give the condition and acreage of winter wheat in Kentucky. Commissioner Rankin, of the Kentucky Department of Agriculture, emphatically denied any knowledge of the report, and it is believed that it must have come from some of the Toledo (Ohio) bucket-shops.

Chairman E. G. Heeman of the recruiting committee of the Chicago Board of Trade Mutual Benefit Association has issued a circular letter to all the members of the Chicago Board of Trade and his committeemen to get busy and round up the laggards that have failed to join the organization. It is proposed to beat the November record of ninety-two new memberships this month, and to do this it will be necessary to secure the greater part of the acceptable risks among the members who have not yet joined.

A lively contest is on for the presidency of the Merchants' Exchange in St. Louis, in contrast to the perfunctory caucus with a lone candidate, as has been the rule for the past few years. The grain men declare that it is time for one of their representatives to be chosen, inasmuch as five years have elapsed since one of their number has filled the place. The present candidates for the place are Edward E. Scharff, the present first vice-president; Thomas B. Teasdale, Bert H. Lang and Roger B. Annan. There are also contests on for several of the other offices. The election is held early in January.

NEW PORTLAND EXCHANGE OPEN.

The Portland (Ore.) Merchants' Exchange began operations as a cash grain market in its new quarters on November 10. Nearly every grain man in the city attended the first session in the new room on the ground floor of the Board of Trade building.

Several months ago the Portland Board of Trade established a grain department at which there was trading in both cash grains and futures. The Board of Trade venture, however, proved to be a failure, and the grain dealers, one by one, withdrew their support from it. The exporters left it when it was decided to permit dealing in futures, and the others dropped out for various reasons. All are now united in the Merchants' Exchange, and every endeavor is being made to push Portland as a grain market.

No attempt was made to do any business at the opening session, the members simply meeting for the purpose of exchanging greetings and arranging for the future. E. W. Wright, manager of the Exchange for the past eleven years, made

a brief speech reviewing the work of the Exchange since its organization in 1879, and George Taylor, who followed him, urged upon the members the desirability of meeting at least once a day. Acting upon this suggestion it was voted to hold the sessions in the future from 1:30 to 2 p. m. each day.

Besides the twenty-five or more grain men, there were also present a number of transportation officials and representatives of other business interests in the city.

NEW WINNIPEG GRAIN EXCHANGE.

On November 25 the new Winnipeg Grain Exchange, which succeeded the old Winnipeg Grain and Produce Exchange, held its first official election of officers. The organization was completed on September 15, but the election was postponed until the later date, when there was a full meeting of members and the following officers were chosen by acclamation: President, H. N. Baird; vice-president, George Fisher; secretary-treasurer, C. N. Bell.

Committee of Arbitration—S. Spink, T. H. Hatchard, Alex. Reid, Donald Morrison, W. A. Matheson, N. Bawlf, F. N. McLaren.

Committee of Appeals—S. P. Clark, E. W. Kneeland, W. W. McMillan, W. A. Black, Thomas Thompson, A. R. Hargraft, W. L. Parrish.

Members of council were elected by ballot, the following being chosen to serve for the first year: Capel Tilt, John Fleming, W. A. Black, A. Kelly, G. R. Crowe, G. V. Hastings, E. W. Kneeland, A. C. Ruttan, D. Morrison, J. C. Gage and W. C. Leistikow.

The only other business taken up by the meeting was the consideration of what is known to the trade as "The 1-cent commission rule." Notice had been duly given that a motion would be brought forward at this meeting to abolish the rule altogether. The motion was made and spoken to and the discussion which followed was long and animated. It was finally decided, on motion, to lay the matter over for six months.

The provisional officers, who have been in charge since September 15, will retire at once in favor of those regularly elected. In the future the annual meeting of the Exchange will be held on the fifteenth of each September.

A REMINDER OF THE OLD NEW YORK CORN EXCHANGE.

The ghost of the old New York Corn Exchange, which was incorporated in 1853 and dissolved in 1865, has stalked into the arena of active business life. In an effort to finally distribute approximately \$2,000 of assets of the former trade corporation and definitely wind up its affairs, William Bruerton, a lawyer at No. 76 William Street, New York City, has advertised to gain information as to seven former firms or individuals, their heirs, executors or administrators, who were stockholders in the venture of a half century ago.

Mr. Bruerton, then a very young man, was the notary public who acknowledged formally the petition on which the courts, in 1865, entered the formal order of dissolution. Relative to the history of the old Exchange and the subsequent inability to end its affairs, he said recently:

"The old New York Corn Exchange was incorporated on April 2, 1853, under an enabling act passed by the state Legislature. Its purpose was to give produce dealers facilities for carrying on business and a place of meeting. In 1861 the Legislature enlarged the Exchange's powers, allowing it to buy real estate, so that a permanent place of meeting might be provided. The buildings obtained were at the northwest corner of South and Broad Streets, about ten blocks from the busy Wall Street center of to-day. Shares of stock were sold at \$25 each and subscribers took, as a rule, from three to four shares. The members bought produce that came in by wagon and boats, acted as agents for those who shipped their corn and grain from outside points, stored products intrusted to their care, if need be, and sold their purchases direct, much as storekeepers do to-day.

"In 1862 the New York Commercial Association was organized. It opened its rooms as a rival of the old Exchange. The latter dwindled and it was decided to sell the property. The court's action in 1865 was a mere order allowing dissolution. In winding up the old Exchange's real estate affairs legal entanglements were encountered, which were finally compromised in 1877. Certain stockholders have never been heard from and it is for them we are now seeking."

The persons and firms who were stockholders in the Exchange in 1865 and who now are sought include Babcock & Co., Newell Chamberlain, Anna Jackson, J. S. Reynolds & Co., A. Shepard (or Shepperd), William W. Yardley and Gillespie, Dean & Co.

COMMISSION

John A. Boardman & Co., stock brokers of Philadelphia, Pa., have made an assignment.

Gale Bros. Co. of Cincinnati, Ohio, have filed articles of incorporation to conduct a grain business at Shawneetown, Ill.

W. S. Booth, formerly connected with W. P. Anderson & Co. of Chicago, Ill., has become associated with A. J. White & Co.

W. M. Young of Casselton, N. D., has been made general manager and president of the John Miller Co. of Duluth, Minn., to fill the vacancy caused by the death of former Governor John Miller.

Farson, Son & Co. of Chicago have added to their connections by taking offices on the ground floor of the Mills Building, New York City, in which they will carry on a general bond, stock and grain business.

Yulee Huyett, who formerly represented Louis Muller Co. of Baltimore, Md., and who has been recently with White Bros. Grain Co. of Indianapolis, Ind., has re-engaged with the Baltimore firm and will represent them in western territory.

The membership of Charles W. Requa on the Chicago Board of Trade was, early this month, posted for transfer. Mr. Requa was one of the oldest members of the Board, having joined in 1875. He is now over 80 years of age and has retired from active business.

An official "oats pit" has been placed on the trading floor of the Minneapolis Chamber of Commerce. The first official trade was made by H. F. Douglas of the Great Western Elevator Co. and president of the Chamber, who bought 5,000 bushels of May oats at 49 cents from Fred Hallett of Hallett & Co.

On January 1 Colonel John W. Conley retires and Lawrence Newman enters the firm of J. H. Wrenn Co. of Chicago. Mr. Conley has been a member of the Chicago Board of Trade for a great many years, while Mr. Newman, who is well known in Chicago, has been recently engaged in business in the East.

W. A. Waldrou, who has been engaged in the grain business on the Detroit Board of Trade at Detroit, Mich., for the past thirty years, has withdrawn from the board and will spend several months abroad. On his retirement he was presented with a handsome gift as a testimonial of the regard in which his friends held him.

It is announced that no change will be made in the business of S. W. Flower & Co. of Toledo, Ohio, on account of the death of the senior partner of the firm, Stevens W. Flower, which occurred in November. The old name is retained and the business is continued by Charles S. Burge, who has been a member of the firm since 1892, and who has been the active manager of the business since that time, owing to Mr. Flower's continued ill health.

L. H. McKendrick and F. C. Ballard have formed a copartnership under the firm name of the F. C. Ballard Co. at Sioux City, Iowa, to take over the business of the branch office at Sioux City of Lamson Bros. & Co. of Chicago. They have become members of the Chicago Board of Trade and will transact their Chicago business through Lamson Bros. & Co. Mr. Ballard has been for ten years past traveling superintendent for the Western Elevator Co. and Mr. McKendrick has been for some time past engaged in Sioux City in the commission business.

R. E. Stephens, Minneapolis representative of Love & Co., on the trading floor of the Chamber of Commerce, recently broke all known records for the execution in the pit of outside orders. A New York order was relayed by Chicago to the Minneapolis office, received by the operator, telephoned to the trading floor, and executed in the pit, sent back on the route it came and was read by the customer exactly 30 seconds after he had sent it out of New York. The day previous Mr. Stephens had executed a similar order in 40 seconds.

There are few better known or more popular men who have been in regular attendance at central and western grain conventions than Charles Knox, representative for the past thirty years of Reynolds Bros. of Toledo, Ohio, whose announcement of discontinuance of business appears in this issue. "Charlie," as he is best known, says he never believed much in omens, but when on Friday the 13th the firm in whose employ he had been for so many years finally decided to go out of business, he thought that Friday had certainly grown to be his hoodoo day. No hoodoo, however, can displace Mr. Knox from the esteem and regard in which he is held by the grain trade universally, and it is hoped that it will be many years before the trade suffers the misfortune

which the personal loss of his discontinuance from the grain business would entail.

Rudolph Beal, who for several years after the establishment of the Omaha Grain Exchange, at Omaha, Neb., was actively engaged in the grain business of that city and who left Omaha to conduct other enterprises, has returned to Omaha and re-engaged in the grain business. Mr. Beal has formed a copartnership with C. Vincent of the Farmers' Grain Co. and they will conduct a cash grain business under the firm name of the Beal-Vincent Grain Co. The capital stock is \$25,000. Mr. Vincent continues at the head of the Farmers' Grain Co.'s business at Omaha.

UNIFORM GRADES.*

After having passed through the grilling to which they were subjected at the St. Louis convention, and after having been adopted as a whole without those who opposed some of the parts expressing a wish to be recorded negatively on the vote so to adopt, the grades of grain, about which I have the honor now briefly to speak, should not require an introduction to the millers of this country, and, in my humble judgment, certainly need no defense as a logical starting point looking to ultimate practicability.

Accordingly, I shall not here undertake to discuss the phraseology adopted. To do that would require no less time than was consumed at the first Uniform Grade Congress, at the second Uniform Grade Congress, and at the twelfth annual meeting of the Grain Dealers' National Association, inclusive.

The men who, upon those occasions, were assembled were not idlers; they were busy men, men of large affairs, and all that was said and done was necessary in order that a thorough common understanding might be reached without burdening the outcome with discontent because of the lack of opportunity to discuss phases which, when taken alone, were of no material consequence, but which, when considered in their respective relations to other and important features, likewise became important.

So, I say, it would be a several days' task for any man to lay before you here a statement of the objections and answers which have studded the course of the evolution of uniform grades.

Whether or not the phraseology now before the country for adoption was determined by the rules of average I am not prepared to say, but an average of all the old phraseology compared with that adopted will reveal a marked similarity, and I hardly think any reasonable man would demand a better foundation upon which to build.

Grautng this, the thing to do, it seems to me, is for us all to advocate and urge the universal adoption of this one set of rules in substitution for the great variety now in vogue and then to set about cutting, squaring and fitting to place.

Some minimums may be found to be too high: others too low. Practical tests by practical men, simultaneously made in different parts of the country, will soon locate the weak points, and the same processes employed in the determination of the inconsistencies will suggest the remedies. We are practically one large family, and no one will deny that family troubles should be settled at home. There are, and will be, differences—no topic ever became the subject of discussion unless differences existed, and no question would ever have become a great question had there not been two distinct sides to it, with intelligent men among both the proponents and the opposers.

I have an abiding faith in the common honesty, the native ability, the brains and the common sense of the millers and grain men of this country to solve the problem of grades: and, in order that the day of final solution may not be too long and unnecessarily delayed, I commend to the individual attention of each unit at interest the expediency of the prompt, unreserved and co-operative contribution of his talents.

An unprofitable season has compelled the Farmers' Elevator at Barry, Minn., to close its doors.

There is again the annual letting of "hot air" on the subject of a farmers' terminal elevator at Superior, Wis., to be operated solely for the benefit of the members of the society in the three spring wheat producing states, North and South Dakota and Minnesota. The last loosening of the valve was at the session at Minot, N. D., on November 20, of the North Dakota convention of the Society of Equity, when it was announced that approximately \$10,000 worth of stock of the total issue of \$50,000 had already been subscribed, and that the "movement is far enough along to insure its success." The three states, North and South Dakota and Minnesota, have formed a district union of the Society, and claim to control 118 out of the 275 farmers' independent elevators in North Dakota; and it is proposed to secure either the control of or an agreement with those elevators, whereby all grain will be shipped to the "terminal at Superior." In the three states, it is claimed, there are 1,800 farmers' elevators, and when these are all united in one "mammoth organization, covering the three great spring wheat producing states," the Society thinks that it will probably control the price of spring wheat.

*A paper by John F. Courcier, secretary of the Grain Dealers' National Association, read before the Ohio State Millers' Association at Toledo, Ohio, on November 13, 1908.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL.B., of the Chicago Bar.]

Liability Under By-Laws of Manager Speculating in Options on Grain.

A company was chartered to purchase, sell, ship and handle grain, live stock and other farm products. Its by-laws prohibited the company or any of its officers from speculating in options on grain or other farm products, and provided that any officer guilty of such misconduct should be personally liable to the company for any damage resulting therefrom.

In an action by the company against one who acted as its general manager, to hold him personally liable for losses caused by his speculation in options with the funds of the company, the Supreme Court of Kansas holds, in the case of Hoffman vs. Farmers' Co-operative Shipping Association, 97 Pacific Reporter, 440, that the following language of the by-laws of the company:—"Or shall engage in speculating, or in options on grain, stock, or produce"—taken with its context, meant the making of contracts in which the parties speculated in the rise and fall of prices.

It appearing from the findings that the company, under the direction and management of the defendant, engaged in speculating in options on grain, the real question at issue was not whether the transactions were illegal and void but whether they were in violation of the by-laws and resulted in loss to the company, for which the defendant was liable.

The fact that the board of directors knew that the defendant was violating the by-laws and failed to take any action to prevent him from so doing could not be held a ratification by the company of his unlawful conduct. The board of directors could not bind the Association by ratifying transactions which the by-laws expressly prohibited, for the reason that the by-laws furnished the rules of conduct for the officers of the Association and applied as well to the directors as to the defendant.

In such an action it was no defense that some of the losses which accrued to the company arose out of speculative transactions which were made by the defendant in good faith and for what he deemed the best interests of the company.

Upon the findings showing the manner in which the business of the company was conducted and the necessity for the employment of an assistant general manager, the court cannot say as a matter of law it was the duty of the defendant to know each day all that was done by his assistant. But, the court says, it was doubtless true that the provision of the by-laws prohibiting speculating in options on grain was not intended to prevent the company from making a legitimate contract for the future delivery of grain.

Rights and Duties of Purchasers as to Inspection.

A contract was made for five carloads of "good, number one, merchantable hay," to be delivered f. o. b. cars at a certain point, the purchasers, commission merchants, to pay the freight to destination. Nothing was said about the time or place of payment for the hay, or the inspection or acceptance of the hay. Two carloads of the hay were shipped. An effort was made by the consignees to sell same before examination or inspection on their part. On inspection of the hay they refused to accept it, and so notified the shipper and railroad company. But on inspecting the hay they took out two bales of it, one of which an employe without their knowledge sold. However, when they learned of the sale they repudiated it, directing the employe to return another bale equally as good. The shipper contended that under the contract it was the purchasers' duty to inspect and accept or reject the hay where it was loaded on the cars, and that if they neglected to do so, they were bound to receive such hay as was actually shipped and rely upon the claim of damages for breach of contract if it was of inferior kind and quality. More than that, the shipper contended that if that was not so, their conduct after the hay reached destination was such as to amount in law to an acceptance thereof.

But the Supreme Court of Oregon does not so find the law. It says (Eaton vs. Blackburn, 96 Pacific Reporter, 870) that it was manifest from the testimony that there was no time or place of inspection or acceptance agreed upon by the parties or for the payment of the purchase price. The payment, therefore, became due and payable on a complete delivery, and there could be no such delivery without an opportunity for inspection.

Under a contract for the future sale and delivery of goods of a specified quality the quality

is a part of the description, and the seller is bound to furnish goods actually complying with such description. If he tenders articles of inferior quality the vendee is not bound to accept them; and, unless he does so, he is not liable therefor. This necessarily gives to the vendee the right, and imposes upon him the duty, of inspection, and he must therefore be given an opportunity to make such inspection before becoming liable for the purchase price, unless the contract otherwise provides; and where articles are to be delivered to a common carrier by the vendor to be forwarded to the vendee at a distant point and no provision is made for inspection and acceptance before or at the time of shipment, the vendee is entitled under the law to a reasonable time after the goods arrive at their destination in which to exercise the right of inspection and to accept or reject them, if they do not comply with the contract.

The commission merchants were not precluded from rejecting the hay by merely receiving it. They still had a reasonable time in which to inspect and reject it, if not according to the contract. Nor did their offer to sell and dispose of the hay before they had examined it amount to an acceptance. This was before they ascertained it was of an inferior quality, and was on the assumption that the shipper had complied with his contract and shipped hay of the kind and quality agreed upon. It was, therefore, not conclusive in law of an intent to accept the hay in performance of the contract. Nor was the unauthorized sale of one bale under the circumstances stated.

NEW FROSTED WHEAT RULING.

Two seasons ago when Canada had a frosted wheat crop the W. P. Devereux firm imported a quantity of it for feed purposes and there seemed an opening for a business of some volume. It was bought and taken in on the supposition that the wheat being fit only for feed would take the lower duty attaching thereto, says the Minneapolis Journal. If it was wheat, as officially understood under tariff schedule interpretation, it would necessarily have to pay an import duty of 25 cents a bushel. But being low-grade stuff, of no avail for commercial use as wheat, its only effect would have been to supply more feed stuff while not entering into competition at all with commercial wheat raised on the American side.

The Government, in the Devereux case, which was of wide interest to the grade trade at the time, decided that it was wheat. It was impossible to use it profitably for feed after paying so high a duty, and so the business ceased. The point that if put into the ground it would germinate, stood out prominently in Government decisions and for that reason mainly, it was declared, it could not be classed as an unenumerated, unmanufactured article, which would have permitted it to take the lower duty.

Now comes P. J. Dalton of Pembina, N. D., with a somewhat similar case, his protest being against the collection of duty as wheat, and at that rate, on importation from Canada of feed screenings.

On inspection by General Appraiser Waite the stuff is found to consist largely of shrunken wheat mixed with a considerable portion of other substances, conspicuous among which are wild buckwheat, sorrel seed, chess and other foreign material.

In the Devereux case the board held it to be an unenumerated, unmanufactured article, dutiable under Section 6. This decision was afterward reversed by the Circuit Court for the district of Minnesota (United States vs. W. P. Devereux Co., 135 Fed. Rep., 428; T. D. 26-160), which held the commodity to be wheat.

Appraiser Waite makes the point that in the Devereux case testimony was introduced to show that the importation might be used for human food and that it would germinate, but in the Dalton case he was of opinion that it could not be used for human food and tests failed to prove germinating power.

It would appear then that the decision is not a reversion or a contrary judgment, the point being emphasized that food use and germination claims do not attach to this latest case.

This is likely to be of interest in any season when the crops of west Canada are frosted, for there is a big market in Minneapolis for feed stuff and facilities here for handling it, and the farmers of Canada who are so unfortunate as to have a frosted crop are glad enough to see it move this way provided it can be sold here for animal food, to their greater advantage.

Otho H. Fiske has engaged in the grain business at Huntington, Mass. Mr. Fiske is the third dealer to enter the local field at Huntington.

IN THE COURTS

The Marshall Hay and Grain Co. of Boston, Mass., has been petitioned into involuntary bankruptcy at the instance of creditors.

G. B. Ehrhard, a grain merchant of Nashville, Tenn., has filed a petition in bankruptcy in the United States District Court in that city with liabilities of \$5,840.83 and assets of approximately \$3,760.

The Kentucky State Pure Food Commission recently obtained warrants against the Early & Daniel Grain Co. and the Cincinnati Grain Co. at Covington, Ky., charging the sale of improperly tagged dairy foods.

The Blue Springs (Neb.) Farmers' Elevator Co. recently filed suit in the county court at Beatrice, Neb., against the Union Pacific Railroad, asking judgment for \$625.90. The case is the result of the loss of 720 bushels of wheat from a car in transit between Blue Springs and Omaha last June.

The Appellate Court has reversed the decision of the Tazewell Circuit Court in the case of Emily H. Bacon, executrix, against the Peoria & Eastern Railway Co., and remanded the case for trial. The suit had been for \$5,000 due to the loss of Bacon's Elevator at Lilly from fire caused by sparks from the railway. The lower court awarded damages of \$2,500 to the plaintiff, but the Appellate Court reversed this decision on the ground that no title to the property was shown.

Referee Beatty of Salina, Kan., has fully settled the bankruptcy case of the H. Parker Grain Co. of McPherson, Kan., which has been before him for some little time. All debts, salaries and claims have been settled and the firm now holds settlement receipts for all creditors' claims. The matter between the Santa Fe and the Bank of Commerce of Kansas City, connected with the case, was settled out of court. All of the properties, land, the Galva mill brook accounts, and the estate connected have been turned over to Mr. Parker, who will operate the Galva Mill.

A petition was filed in the Federal Court at Minneapolis on November 28 requesting that the Lahart Elevator Co. of Minneapolis be declared bankrupt. The petitioners, Horace H. Sheldon, Esther Hastings, executrix of the estate of Charles W. Hastings, and the law firm of Lancaster & McGee, set forth that on July 27 \$30,000 in bonds was turned over to the Gilfillan-Remund Co. and \$5,000 in bonds to W. T. Crane, making them preferred creditors. Claims of the petitioners aggregate \$15,154.22. The Lahart Elevator Co. has not been actively engaged in business for several months.

The Farmers' Elevator Company of Emerado, S. D., has begun suit against the Farmers' State Bank of Emerado to recover \$2,500 claimed to be due the Elevator Company. According to the Elevator Company's bill of complaint there should have been a balance of \$2,500 in the bank to the credit of the Company at the time John Hempstead committed suicide. He was treasurer of the Elevator Company and also cashier of the Bank. The Bank has put in a counter claim for \$3,200, charging that the Elevator Company is responsible for the defalcations of Hempstead, the total amount of which was about \$6,000.

The answer of the Iron Mountain Railroad in the suit filed against it by the Brook-Rauch Milling Co. for \$55,000 damages alleged to have been sustained by the plaintiff through concessions the suit filed against it by the Brook-Rauch Mill which were not given to the plaintiff, as noted in these columns last month, has been filed in the United States Circuit Court at Little Rock, Ark. In the complaint it is alleged that the railroad bought land and erected the mill and elevator in Argenta and let the Bunch Co. have the use of it at a very low rental. In answering this point the railroad company admits it leased the mill and elevator to the T. H. Bunch Co. for \$1 per annum, but this was not the only consideration, for the lessee was to pay all taxes, special and otherwise, all assessments, carry all kinds of insurance on the plant and keep up all repairs. All other sections of the complaint are answered with a general denial of the allegation.

The Van Winkle Grain and Produce Co. has been returned the victor in the suit against it at Paterson, N. J., by the Lackawanna Railroad for \$158 for car service. The railroad company in 1905 notified the Van Winkle Co. that four cars of oats, consigned to the firm, had arrived here. As the railroads charge for service if cars are not unloaded within forty-eight hours of notice of arrival had been given, the Van Winkle Co. sent men to unload the cars. The men found the cars at Lakewood, where they could not be

unloaded, so the oats remained where they were for some time. When the cars were taken to Slater Street they were unloaded, and the railroad company subsequently sent in a bill for \$158, which the Van Winkle Co. refused to pay on the ground that the cars could not be emptied where they were left at first. Suit was brought and resulted in a verdict for the defendant. The verdict means that consignments must be taken to convenient places for unloading, otherwise railroad companies cannot charge for service after the forty-eight-hour limit has expired.

ADULTERATED CORN CHOP.

Under the Kansas feeding-stuffs law pure corn chop is not subject to registration or tagging, but is subject to inspection in respect to purity and weight of packages. The law provides that all weights of feed stuffs shall be net; that is, a sack of corn chop purporting to be 100 pounds must weigh enough more to make up for the weight of the sack. Reasonable allowance should be made for atmospheric influences.

Pure corn chop is the product obtained by grinding well-cleaned shelled corn, removing nothing therefrom and adding nothing thereto. Anything resembling corn chop but not meeting the preceding definition must be treated either as a mixed feed or as one which has been subjected to a "process whereby the composition of the original material is altered." In either of these two cases the product must be registered annually with the director of the experiment station and be labeled so as to show the name and address of the manufacturer, the true nature of the feed, the net weight, and the percentage of protein and of fat guaranteed.

In the manufacture of cornmeal the corn bran is removed by bolting and the temptation is strong upon a miller to put this by-product in with his corn chop. This practice, as indicated above, is not legitimate, constituting, in fact, a serious adulteration. Corn bran, though possessing a good percentage of fat and of protein, is greatly inferior to whole corn in its content of starch and has a high per cent of fiber which is of little or no net feeding value. If a manufacturer wishes to work off his corn bran with corn chop he must plainly tag it as "Corn chop and corn bran" and sell it under all the conditions applying to mixed feeds.

So, too, if the miller after grinding corn removes some of the finest and best parts for cornmeal and sells the remainder as corn chop he is violating the law unless he sells it under a label that shows its true nature, and has complied otherwise with all of the provisions of the feeding-stuffs law.

Again, corn chop is not to be made the medium through which screenings of various kinds are disposed of, neither is it to include rotten corn, corncobs or dirt. There is no question that in the past much of such fraudulent feed has been foisted upon the public, and it is against such that the law operates.

The object of the law is to prevent unfair competition among manufacturers and fraudulent impositions upon consumers. The law will be enforced from this standpoint and the hearty cooperation of the interested public is solicited.—J. T. WILLARD, Chemist Experiment Station.

SEES GRAIN GOING WESTWARD.

The Grand Trunk Pacific Railway Co. expects to complete its line to the Pacific Coast at Prince Rupert by 1911 and a few years later the Panama Canal will be completed and a vast change will take place in the movements of western commerce. "At present the wheat crop is either hurried to ports on the Great Lakes, Duluth, Fort William and Chicago, during a few weeks between spring and the closing of lake navigation in November, or it is held up for six months in elevators at considerable cost, or, again, if it is carried through to the eastern Seaboard in winter, when the St. Lawrence route is closed by ice, the long haul through heavy snows makes the operation difficult, costly and even disastrous both for the railway and to the farmer.

"West bound from Saskatchewan and Alberta to Prince Rupert the grades are easy. There is very little snow in winter, so that when the Panama canal opens in six years I look to see Prince Rupert one of the great grain ports of the world. I have more than once ventured the prediction that in my lifetime we shall haul to the Pacific as much grain as we shall haul to the Atlantic."

J. F. Watson, formerly superintendent of the Federal Elevator at Langdon, N. D., which recently burned, will shortly assume charge of the Linden Investment Co.'s Elevator at Wales, N. D.

HAY AND STRAW

The Pyle-Berger Hay and Feed Co. of Kent, Wash., has changed its name to the Pyle-Corson Feed Co.

Over \$14,000 worth of hay was consumed in the recent fire which destroyed the Farmers' Union Warehouse at Durant, Okla.

The N. I. Gorsuch Son Co. of Westminster, Md., recently shipped a carload of rye straw to a horse collar manufacturer in San Francisco, Cal. The freight alone on the load was \$200.

The large Illinois Central warehouse at New Orleans, La., was burned to the ground on November 26 and about 100 carloads of hay destroyed. The total loss was about \$47,000, partly insured. The origin of the fire could not be determined.

The quarantine at the Buffalo (N. Y.) Stock Yards, due to the appearance of the foot and mouth disease among the cattle there, has been extended to shipments of hay. All such shipments must be fumigated and officially inspected before being sent out.

The hay market at New Orleans now exhibits a better condition than at any time within the past year. Demand is excellent, and there is difficulty in filling orders for the higher grades from the stocks on hand. Choice timothy is particularly in demand, selling freely at \$17.50. Demand in lower grades, however, is still dull.

The following is the legalized rule for measuring hay in the stack in Montana: "From the distance over top subtract the width and divide the remainder by 2; this gives solid height. Multiply the height by the width, and this product by the length of the stack; the result will be the cubic contents of the stack. Dividing this by 422 will give the number of tons, 422 being the number of cubic feet in a ton of hay after the stack has settled from 30 to 60 days."

ALFALFA MILLING NEWS.

An alfalfa meal mill is being established at Tehama, Cal.

Val Krehbiel's new alfalfa mill at Moundridge, Kan., is nearly completed.

Geo. J. Wise is planning the installation of an alfalfa mill at North Enid, Okla.

Ludvig Nelson's new alfalfa mill at Lindsborg, Kan., has commenced operations.

W. G. Wadley is contemplating the erection of a 60-ton alfalfa mill at Shreveport, La.

W. B. Swygard is contemplating the establishment of another alfalfa mill at Albion, Neb.

The Alfalfa Products Co. has commenced the installation of machinery in its new 40-ton mill at Sunnyside, Wash.

The T. B. Hord Alfalfa Mill at Central City, Neb., was recently completed and put in operation. The mill is in charge of J. H. Scott and has a capacity of four tons a day.

Hatch Bros.' Alfalfa Mill at Fowler, Kan., was damaged by fire to the extent of about \$1,000 on November 3. The fire was the result of sparks from a locomotive. It will be repaired at once.

The alfalfa mill at Hobart, Okla., reports a rushing business. The increase has been so great that President Lampkin is planning to build an addition to the mill in time to handle the first spring crop.

The Walla Walla Alfalfa Meal and Feed Co. of Walla Walla, Wash., has been incorporated, with \$25,000 capital stock, by Charles Cooper, H. H. Crampton, S. W. Smith, John A. Bailey and C. R. Duncan.

The new Hutchinson (Kan.) Alfalfa Products Co. has commenced operations. The company is meeting with great success. At present there is enough stock on hand to keep the plant busy for the next six months.

A number of local capitalists have purchased the old starch works at Nebraska City, Neb., and will equip the buildings as an alfalfa meal plant. H. H. Hanks, G. E. Hanks and Walter McNamara are behind the proposition.

The Lakeside Milling and Elevator Co. are planning to erect a large alfalfa mill at Emporia, Kan. A site has already been purchased. The company, which was recently organized, is capitalized at \$20,000. E. H. Thomas is secretary of the company.

Work on the new alfalfa mill at Salina, Kan., is progressing rapidly and Manager H. D. Underwood expects to start grinding about the middle of this month. The mill building will be, when completed, 135x40 feet. Power will be supplied by a 100-horsepower motor. The capacity will be 100 tons per day of twenty-four hours, with

storage capacity for 250 tons of the hay and 20 carloads of meal.

The Sterling Alfalfa Milling Co. of Sterling, Kan., has been incorporated with a capital stock of \$25,000.

The Henrietta Milling Co. of Portland, Ore., is establishing an alfalfa mill at Wapato, Ore. Manager T. A. Fleishauer has been put in charge and expects to have the mill in running order very soon. The mill will have a capacity of 50 tons daily, running twenty-four hours.

The American Warehouse Co., otherwise known as the American Alfalfa Food Co., is transforming the old Burton Car Works at Wichita, Kan., into an alfalfa milling plant. New and heavy machinery is being installed in two of the buildings, which will constitute the mill proper. The other three buildings will be used for warehouse purposes. Power will be furnished by 150-horsepower gas engines. The company has already contracted for over 2,000 tons of alfalfa. The company will make a specialty of balanced rations and poultry feed. The officers of the company are: H. K. Lindsey, president; E. A. Rebhan, vice-president; E. A. Dawson, treasurer; H. P. Larsh, secretary; Berkeley Dawson, manager, and H. C. Edwards, mill superintendent.

QUARANTINE ON HAY AND STRAW PACKING.

Owing to the recent prevalence of foot and mouth disease among cattle, the Department of Agriculture on November 30 issued an order quarantining hay and straw used in packing goods. The order prohibits the use of hay and straw when used in the interstate commerce of the states of New York, Pennsylvania, Maryland and Michigan. The result of the order was considerable confusion, particularly in the holiday shipping trade. The order is qualified to the extent that any shipper may send for an agent of the Department and have the packing material disinfected. After such a process a certificate is issued to the effect that the material has been disinfected and may be safely used for packing.

ALFALFA FOR PENNSYLVANIA.

A lively agitation is at present being carried on in Pennsylvania to induce the farmers of that state to take up the culture of alfalfa hay. There have been agitations in previous years, but never with much success. A number of small farmers have attempted to grow a paying yield, but have mostly failed, principally through lack of knowledge of alfalfa culture. On the recent whirl of the Pennsylvania Railroad's Farmers' Special Instruction train, alfalfa was the insistent theme that was carried to the doors of the ruralists of Delaware, Berks, Lancaster and Chester counties. Everywhere the story of this perennial plant fell upon eager ears, for the farmers of this prosperous agricultural center seem a bit confused as to how to raise alfalfa successfully.

The Department of Agriculture at Washington and the Pennsylvania State Department of Agriculture are also pushing the matter. Pamphlets describing the hay and its culture in every phase have been prepared and circulated among the farmers. Professor Alva Agee, head of the department of agricultural extension at the Pennsylvania State College of Agriculture, has carried on a number of experiments in alfalfa growing, all with remarkable success. These and other experiments have led to the conclusion that inoculation of the soil with alfalfa bacteria is necessary to produce the best results.

MICHIGAN HAY TRADE AT A STANDSTILL.

As noted elsewhere in these columns, the hay trade in the states of Michigan, New York, Pennsylvania and Maryland is suffering from an interstate commerce quarantine, due to the prevalence of foot and mouth disease among cattle. This quarantine has fallen with particular hardship upon Michigan, which at this season of the year supplies a great bulk of the hay trade. The disease is believed to have originated in Michigan and the authorities of that state are making every effort to stamp it out. Dr. P. H. Mullaney, the cattle expert of Boston, has been engaged, and the work of killing the diseased cattle and disinfecting all buildings has been vigorously pushed. All milk from the diseased sections has been seized and the hay throughout the state thoroughly fumigated.

A committee of Michigan hay men, consisting of J. A. Heath of Lenox, George C. Warren of Saginaw and Albert Todd of Owosso, was sent to Washington on December 4 relative to the lifting of the quarantine. Secretary Wilson of the Department of Agriculture decided, however, to continue the embargo until the last possibility of the spread of the disease is removed. Such a policy will, it is believed, give the best results in the long run, as it will more completely restore confidence, both at home and outside the state.

OBITUARY

Matthew Fee, a well-known grain buyer of Bathgate, N. D., died recently at that place of Bright's disease.

George W. Kellogg, a prominent citizen and grain dealer of Grand Forks, N. D., died last month after a short illness.

Leander Lehnen, of the firm of Lehnen Bros., grain dealers at Corning, Iowa, died suddenly at his home in that place on November 9.

Floyd S. Loomis, but recently appointed manager for the Imperial Elevator Co. at Eureka, Mont., died suddenly in that city on November 30 of peritonitis. A widow survives.

William Simmons, for years manager of the Gladwin Elevator Co., and one of the best known residents of Gladwin County, died at his home in Standish, Mich., last month at the age of 64.

Frank E. Foster, a former grain dealer at Toledo, Ohio, died suddenly of heart disease at his home in Chicago last month. Of late years Mr. Foster had been associated with the management of the Wisconsin Central Railway. A widow and one daughter survive.

Frank B. Sedivy, agent for the National Elevator Co. at Herriot, N. D., was killed on November 10 at that town. While attempting to control a team of horses which had become frightened, he was trampled upon and almost instantly killed. He leaves a family.

George Price, a prominent grain merchant of Toledo, died at his home in that city on November 27. The cause of his death was cerebral hemorrhage. Mr. Price was born in London, England, in 1846, coming to this country in 1872. In Toledo he was connected with the grain firms of Banks & Walker, F. N. Quale and A. W. Cottontown. A widow and four children survive.

Alfred Daggett, formerly a large grain buyer at Ogden, Ill., died on November 17 while on a visit at the home of his sister, Mrs. Emma Short, at Odessa, Mich., after an illness of three weeks. Mr. Daggett was long identified with the grain business in Eastern Illinois, removing several years ago to Oklahoma. In spite of his 83 years, Mr. Daggett was actively engaged in business. Mrs. Daggett survives him.

Stevens W. Flower, a prominent member of the Toledo Produce Exchange, died on November 13 at his home in Toledo, Ohio, in his seventieth year. Mr. Flower has been continually engaged in business in Toledo since 1874 and was highly regarded by all who knew him. He established the seed house bearing his name and served one term in 1899 as president of the Exchange. As a mark of respect the Exchange adjourned on the day of his death.

John R. Anderson, prominently identified with the grain business in New Orleans, La., and St. Louis, Mo., died at his home in the latter city on November 24. For a number of years he was superintendent of old Elevator A in St. Louis, removing to New Orleans when that house was torn down. In New Orleans he also took charge of a grain elevator and was for six years a grain inspector for the Board of Trade. Last April he moved back to St. Louis. Mr. Anderson was 49 years of age and is survived by a widow and one daughter.

Charles K. Sacket, for many years connected with Ware & Leland of Chicago, died early in December from a complication of troubles which brought on heart disease. Mr. Sacket was born at Sackets Harbor, N. Y., fifty-six years ago and came to Chicago at an early age, joining his father in the grain business. He later went with Kennett & Hopkins and represented them a short time in the Cleveland, Ohio, market. Returning to Chicago about ten years ago, he engaged with Ware & Leland, remaining with the firm until his death. Mr. Sacket had charge of the correspondence and also wrote the daily market letter. He was a man of quiet habits, was unmarried and had many warm friends among the traders whom he met daily on change. The funeral took place at Graceland Cemetery, Chicago, where he was buried.

M. Ryan has assumed the management of the elevator at Trosky, Minn.

The grain elevator and other properties of the Seneca Grain, Lumber and Supply Co. have been sold to Samuel D. Holderman, a resident of Grundy County, and who is interested in the grain elevator at Stockdale. The consideration mentioned in the transfer is \$20,000. The company was organized by the farmers about Seneca, Ill., several years ago, and for some years was very prosperous, but it got to speculating in options and the heavy losses resulting therefrom prompted the owners to dispose of the property.

FIRES-CASUALTIES

A warehouse fire at Ronda, Cal., last month consumed 150,000 bags of grain.

The elevator of A. A. Truax at Hartford, S. D., was destroyed by fire last month.

The Cargill Elevator Co.'s house at Amherst, S. D., was totally destroyed by fire last month.

The Montana Elevator Co. recently suffered a small loss by fire at its house at Straw, Mont.

The elevator of C. D. Pals at Kenaston, N. D., was totally destroyed by a fire of unknown origin on November 26.

The Farmers' Union Warehouse at Durant, Okla., was destroyed by fire on November 22. The cause is not known.

Peter Westerdahl's elevator at Hersey, Wis., burned on December 1 with a loss of \$3,000, partially covered by insurance.

The McHugh-Christensen Elevator at Antelope, N. D., was destroyed by fire last month. The loss is fully covered by insurance.

The Interstate Elevator at Kandiyohi, Minn., was totally destroyed by fire on the night of November 23. The origin of the fire is unknown.

The St. Anthony Elevator at Park River, N. D., burned last month. A loss of \$16,000 was sustained in the blaze, the origin of which is unknown.

Fire originating in the engine room of the Hawkeye Elevator at Davenport, Iowa, did about \$1,500 worth of damage. The elevator proper was not burned.

The Johnson Elevator and warehouse adjoining, at Minco, Okla., was destroyed by fire on November 23 with a loss of about \$25,000, with \$15,000 insurance.

The elevator of the Farmers' Grain Co. at Warwick, N. D., was destroyed by fire last month with a loss of \$8,000, covered by insurance. Incendiarism is suspected.

A fire in the oil house of Holt's Elevator at Shawneetown, Ill., last month was extinguished by the prompt action of the elevator men and a big blaze narrowly averted.

The Lincoln Grain Co.'s Elevator at Waverly, Neb., was burned to the ground last month. The loss is put at \$6,000, partially covered by insurance. The house will be rebuilt.

George Warner, manager for the Miller Elevator Co. at Olivia, Minn., severely injured his right hand in a belt last month. Luckily, the injury will not be a permanent one.

An explosion in the elevator of Walker & Chambers at Wheatland, Ind., on November 18 caused a small fire loss. Mr. Walker was injured about the face by the explosion.

The Harrington Elevator at Booge, S. D., was burned to the ground on the night of November 24. Three carloads of grain were also destroyed. The loss is covered by insurance.

In the general fire at Gulfport, Miss., on November 12 the plant of the Gulfport Grain and Elevator Co. was totally destroyed, with a loss estimated at \$35,000, partly covered by insurance.

Fire starting in an adjoining warehouse consumed the Bagley Elevator at Hillsview, S. D., on the night of November 3. About 7,000 bushels of grain were burned. The loss is in the neighborhood of \$10,000.

The elevator of M. W. Cardwell at Perry, Kaua., was destroyed by a fire starting in the fuel shed on November 22. The loss is about \$12,000, with only \$4,000 insurance. Mr. Cardwell will rebuild as soon as possible.

The building occupied by Madden & Trumbull, grain dealers at White River Junction, Vt., was destroyed by fire on November 18. The loss is about \$14,000. Defective wiring is believed to have caused the fire.

The large elevator of Arza Smith at Sheridan, Ind., was destroyed by fire on November 28. The origin of the fire is unknown. About 12,000 bushels of grain were consumed. The loss is placed at \$20,000, partly insured.

The old Taylor Elevator and Cornmeal Mill was destroyed by fire on November 29. The elevator had not been in use for some time and the actual cause of the fire is not known. The loss is partly covered by insurance.

The old Knapp Elevator at Minooka, Ill., was totally destroyed on November 14 by a fire, which for a time threatened to sweep the town. Locomotive sparks are believed to have caused the blaze. The elevator was owned by the Farmers' Mutual Elevator Association. About 19,000 bushels of grain were burned. The total loss is placed at \$28,000, with about \$25,000 insurance. A tem-

porary grain office has been erected and business will continue as heretofore.

A fire of unknown origin consumed the Federal Elevator at Langdon, N. D., last month. The loss is placed at \$6,000 on the building and \$4,000 on the contents.

Thugs sandbagged Nick Kirsch, manager of the Farmers' Elevator at Watertown, S. D., on November 14 as he was going to his home. Robbery is supposed to have been the motive for the assault. The police later caught the men. No money was lost.

A severe fire at the Grand Trunk's docks at Portland, Me., on December 4 did considerable damage to Grand Trunk Elevator No. 1 at that point before the flames were brought under control. The overhead grain conveyors to the docks were entirely destroyed.

H. A. Strehlow, in charge of the old Andrews & Gage Elevator at Wadena, Minn., met with a serious accident in the elevator on November 27. His hand became caught in the elevator and the rapidly moving buckets cut off the tips of his fingers and crushed the hand.

G. H. Banton's Elevator at Hancock, Iowa, was destroyed last month by a fire believed to be due to spontaneous combustion. The loss was \$6,500, with \$3,500 insurance. Mr. Banton will rebuild immediately and pending operations will install a car loader and carry on business as heretofore.

A TYPICAL CASE.

The surveying of all classes of property going on daily by fire insurance inspectors reveals extreme carelessness on the part of the people. Typical cases of neglect, or bad conditions, the correction of which would mean safety to the insured and to the community, as well as a reduced premium rate, are cited from time to time by Insurance Engineering. These cases serve as illustrations of conditions to be found in thousands of places throughout the United States and Canada. The journal named gives in a recent issue one in the elevator line, as follows:

"New York.—A fair-sized brick and frame, sprinklered grain elevator. Automatic alarm out of order; unprotected floor openings; gravity tank of too small capacity. Allowances for automatic alarms are made for the guaranty that same shall be maintained in perfect order, and a violation of this warranty voids the policy, in addition to the false security conveyed by their presence. It is sometimes difficult to cut off each floor so as make single fire units, but care can be taken to avoid all unnecessary floor openings and, where it is possible, enclose in a standard shaft or trap those that do exist. The question of water supply to sprinkler systems is one of technical measurement, and to ascertain the quantity requisite to perfect protection the underwriters having jurisdiction should be consulted. In this case the smallness of the gravity tank would have caused, no doubt, a serious loss for want of water to supply the sprinklers. It is these negligences that cause dissension toward the sprinklers, as the general public only hear of the loss."

RATS DESTROY CORN.

One of the causes for the abandonment of Indian corn as a crop, in Connecticut at least, is the destruction wrought by wharf rats, says a contributor to the Country Gentleman. These animals are always in evidence, but last season they appeared in greater force than for some time past. One farmer who had several fields of corn which had attracted much attention during the first part of the season reports that over half of it was ruined by rats, which not only spoil the ears of corn, but also damage the stalks and leaves and render them far from satisfactory for feeding to cattle. The farmers whose fields are some distance from the water are not bothered, but there is always a loss of about one-eighth of the entire yield, and last year it was much greater.

The farmers think that the growing of Indian corn is rather a poor financial venture with this handicap, and are looking around for some exterminator. Cats do not seem to be of much benefit, as many of the rats are of such great size that the cats are afraid of them. Poison has been tried without avail and other methods have been tried without bringing relief. The question of importing ferrets has been thought of to rid the farm buildings, and also to clear the fields, but many farmers consider the ferrets nearly as great a nuisance as the rats, and are loth to obtain their aid. Unless some remedy is thought of it looks as if some Indian corn is going to be a neglected crop among the farmers along the Sound.

BARLEY and MALT

The Buffalo Chamber of Commerce has sent a committee to Washington to urge the tariff revision committee of Congress to place barley on the free list.

A fire, originating in the drying kilns in Elevator C, caused a loss of \$2,000 at the plant of the Milwaukee Malt and Grain Co. at its city plant in Milwaukee on November 30.

The interesting feature in to-day's market was the 2-cent rise in barley. There are no "futures" in this grain, no special crop reporter or press agent, no pretension or centralized support, so that any advance in its price is on merit alone—and legitimate.—Pope & Eckhardt Co., December 3.

The Pacific Coast barley crop is less than 50 per cent of what was produced last year and consumers in that section will have to go East for grain to supply their needs. Consequently a large movement of barley into California is looked for in the near future, and the railroads are preparing to meet it.

The new 225,000-bushel barley elevator of the Merchants' Elevator Co. in southeastern Minneapolis has been put in commission. It is operated throughout by electricity and has a track capacity of 90 cars. The plant was built by H. D. McCord and A. H. McIntyre of Minneapolis and the Rothscild Grain Co. of Davenport, Iowa, and is intended particularly for the barley trade.

The Van Dusen-Harrington Co. estimates that about 20 per cent of the barley crop remains in the farmers' hands, and the amount in country elevators and in transit is placed at from 8 to 12 per cent. Minneapolis has so far received about 11,000,000 bushels and Duluth something over 4,000,000 bushels with the amount consumed in the country and sent to other markets still to be estimated.

The remodeled barley elevator of the Watertown Grain Co. at Watertown, Wis., has been put in operation. The house was moved to another location and placed on a permanent foundation. The plant has been partially remodeled, new machinery installed and an electric motor put in to furnish operating power. The capacity is now 30,000 bushels. The elevator is in charge of William Nickels. The Watertown Grain Co. also operates a small 8,000-bushel barley elevator at Clyman, Wis.

GOOD YIELDS OF BARLEY.

The highest yield of six-rowed barley in 1907 at the Ontario Experiment Station was produced from a special strain originated from a selection from the Manshury barley, originated at the College in 1906. The College has produced a considerable number of hybrid barleys by using the Manshury as one of the parents. Of six varieties of two-rowed barleys grown for 14 years in succession two-rowed Canadian, Jarman, selected beardless, and New Zealand Chevalier ranked first in yield, with 64.6, 63.8 and 62.2 bushels per acre, respectively.

Of the hullless varieties grown for 14 years in succession, Guy Mayle ranked first with 48.3 bushels. Purple second with 45.4 bushels, and Black Hullless third with 44.9 bushels. The last-mentioned variety is the most extensively grown throughout Ontario. Winter barley at the College for 11 years has given an average yield of 56.5 bushels of grain and 1.3 tons of straw per acre. In 1907, of three winter varieties, Tennessee was the most productive, yielding 53.4 bushels per acre. During the past 14 years winter barley has been completely killed out on three occasions.—Orange Judd Farmer.

BARLEY SITUATION.

The quality of the barley is not so good as in the forepart of the season. Nothing but a good frost can stop the deterioration. Recent experiments have shown that much of it grows very uneven, and also much musty barley arrives. To give an idea of the strength of the barley market, it was present when 70 cents per bushel was offered for a round lot of fancy Wisconsin barley. The offer was refused, and the barley held for higher prices.

The world crop of barley is short. Great Britain and Ireland have a decrease in acreage of 60,000 acres, with a much reduced yield per acre, also in quality. England used to import much barley from California, but as the crop is short there, will have to fall back on Canada. Germany will have a crop of about 130,000,000 bushels, a reduction in yield and quality. In Austria-Hungary, barley and oats have suffered much in yield and quality from the excessive moisture. In Spain, the crops are so bad that a reduction in import duties had to be made. Russia is the only country that

has an average crop of barley of inferior quality. Roumania and Bulgaria have a reduced crop of both barley and oats. In summing up the situation it is, as I said before, the price of other cereals, and especially oats, will control the price of barley, and not the demand of the maltsters. Barley at present is the cheapest grain for feeding purposes, but will not remain so long. Fully 70 per cent of the barley is out of the farmers' hands.—W. H. Prinz in *American Brewers' Review*.

[From the "Western Brewer."]

CULTIVATION OF BARLEY.

BY A. KOENIG.

In recent years the barley crop in the United States has neither been as good nor as abundant as it was in former times. The blame for this has been laid to bad conditions of weather, particularly heavy, untimely rainfalls; but, even if it cannot be denied that there is some reason for such an assertion, nevertheless the real cause for the continuous deterioration of the barley as to quality must be looked for somewhere else. The demands on the barley market have increased from year to year in proportion to the continued increase in the output of the brewing industry.

By using choice seed barley satisfactory results can of course be obtained on fresh ground, so-called "virgin soil;" but the farmers have generally disregarded not only the essential point of a rotation of crops but have practiced excessive cultivation, thereby gradually spoiling the quality of the seed as well as the entire crop. The result of this procedure has been that the barley crop became more and more unfit for brewers' purposes, while the demand for a good article steadily increased and the prices for such were forced up considerably.

To this carelessness of the American farmers is due the fact that the districts for the growing of barley have been shifted more and more for many decades. During the fifties and the sixties of the last century, Missouri, for instance, yielded us excellent barley. The counties along the Pacific railway were renowned for their splendid crops and they supplied all the breweries of St. Louis and vicinity with the much-favored article. This is likewise true of the states of Ohio and Iowa, which until late in the seventies produced excellent brewer's barley. But a continuous breeding in, as well as the deterioration of the originally rich and fertile soil, spoiled the crop in the course of years to such an extent that the cultivation did not pay at the prevailing low prices and the farmers discontinued the growing of barley and used their grounds for planting other cereals.

A similar occurrence we find in Wisconsin and Minnesota, two states in which the barley some years ago ranged among the best of the entire country, and which was especially in favor of the brewing industry. Also in this instance the farmers have entirely disregarded the fundamental rules of rational agriculture—sowing of the choicest seed and a rotation of crops—with the same result, degeneration of the grain.

Thus we have here but a repetition of what had already been observed in the cultivation of wheat, especially on the extended farms on the prairies of the Dakotas. The systematic exhaustion of the soil year after year until the same was ruined drove the farmer away farther and farther, if he did not prefer, or understand how, by using fertilizers or changing the crops, to restore that power which he had extracted from the soil.

Whoever carefully peruses the reports upon the crops of the last twenty-five years will note that the barley gradually deteriorated qualitatively, even though not very noticeably at first, and this solely from the causes mentioned. While a bushel of barley in the years from 1880 to 1900 weighed from fifty to fifty-two pounds, at present the crops of the states mentioned above, including Canada, show an average bushel weight of but forty-five to forty-six pounds, a result speaking a plainer language than volumes of agricultural considerations.

But if the farmer, induced by the poor results of his cultivation of barley, should resolve to plant in future only corn, oats or wheat, over-production of these cereals would soon result, thereby depressing the prices so much that their cultivation would not pay at all. We already have had times when the farmer used his corn and even wheat as fuel, because he could not realize money from these "rich blessings," and something similar could occur again, if eight million acres of ground were suddenly withdrawn from the production of barley and used for the cultivation of corn, oats and wheat.

It is up to the Agricultural Department in Washington, up to the brewer and maltster, as

well as up to the press of our country, to educate the farmers of our barley-growing states in this matter, a matter of the greatest importance to agriculture as well as to the brewing industry of the United States.

Arrangements must be made by which the farmer can procure fresh, healthy and productive seed in a convenient and cheap way. The government, being impartial in this matter, should explain as much as possible to him the disastrous results of breeding in, and the undisputed advantages of the rotation of crops as well as the necessity of a rational use of fertilizers.

If in this direction is done what in fact ought to have been done already years ago by those most interested in the matter, then there is no doubt that within a short time we again shall have faultless results, much to the joy and benefit of both the farmer and the industry which cannot exist without the same.

PERSONAL

Victor Forrest is erecting an elevator at Alcester, S. D.

Joseph F. Jenkins is engaged in building an elevator at Wellington, Ill.

H. C. Weidenbach has accepted a position as grain buyer at Armour, S. D.

Edward Case has been put in charge of Steele Bros.' new elevator at Silex, S. D.

Royce Dysart has accepted a position in one of the elevators at Kasota, Minn.

Ernest Nelson has been put in charge of the Duluth Elevator at Kragness, Minn.

Wayne Lowry has resigned his position with the Cargill Elevator Co. at Dassel, Minn.

Albert Rieman of Deer Creek, Minn., has taken charge of an elevator at Grafton, N. D.

Charles Spies has become manager of the Johnson & Graham Elevator at Ames, Neb.

T. M. Collipriest has taken charge of the C. M. & St. P. Elevator at De Witt, Iowa.

Joseph Smakel has taken a position at the Harris Elevator at Williamsburg, Iowa.

A. D. Russell has been installed as manager of the Hawkeye Elevator at Yankton, S. D.

John Billstein has been installed as buyer at the Monarch Elevator at Little Falls, Minn.

C. A. Marsbman has succeeded Emil Osterich at the C. C. Buck Elevator at Hubbard, Iowa.

Clyde McPeek has taken charge of the McCaul-Webster Elevator Co.'s house at Gayville, S. D.

Theodore Paal has accepted the position of grain buyer for the Skewis Grain Co. at Dovray, Minn.

J. D. Everett has succeeded E. Maloney as buyer for the J. P. Coffey Grain Co. at Ash Creek, Minn.

Clinton Green will succeed C. F. Haffey as manager of the Gordon Elevator at Burtonview, Ill.

Charles C. Flanley has succeeded W. F. Brittan as manager for the Interstate Grain Co. at Sioux City, Iowa.

Oliver Storlie has removed from Revillo to Hayti, S. D., to take charge of an elevator in the latter place.

Peter Terhune has resigned his position as grain buyer for the Columbia Elevator Co. at Bowman, N. D.

H. J. Benson has assumed the temporary management of the Farmers' Elevator Co.'s business at Eldora, Iowa.

James Patton has resigned his position as elevator manager for the Philipsburg (Kan.) Mill and Elevator Co.

W. P. Close of New Ulm, Minn., has made application for a position on the Minnesota State Board of Grain Appeals.

Henry A. Olsen has been appointed manager for the Columbia Elevator Co. at Scranton, N. D., succeeding Fred Schultz.

Otto Griep and Ferdinand Giese have finished their elevator building in the Dakotas and returned to their homes at Le Sueur, Minn.

Alfred Rasmus has resigned as manager of the Farmers' Elevator at Winfield, Iowa, and A. L. Thomas has been chosen for the position.

D. Lemay has been appointed superintendent of the C. P. R. elevators at Fort William, Ont., in place of Superintendent Sibbald, who has resigned.

The fellow employees of Orlie G. Greenleaf, with the grain firm of J. O. Ellison & Co., at Bradford, Mass., recently celebrated the completion of his twenty years of service with the company, by a surprise party at his home. Suitable com-

TRADE

memorative gifts were presented to Mr. and Mrs. Greenleaf.

George Osgerby has been appointed manager of the Superior Elevator at Emmetsburg, Iowa. He will assume his new duties on January 1.

J. C. Ashley has closed his elevator at Kensal, N. D., and will remove to Valley City, N. D., where he has been appointed to the position of weighmaster.

William George has resigned his position as grain buyer at Oldham, S. D., to accept a similar position at Madison, S. D. F. M. Becker succeeds Mr. George at Oldham.

Clark Blacker has resigned his position as manager for the Farmers' Elevator Co. at Osman and Lotus, Ill. Mr. Slack of Bloomington, Ill., succeeds to the position.

After twenty-eight years of service, E. P. Dotson has resigned his position as grain buyer for the Atlas Elevator Co. at Sanborn, Minn. A. F. Grohne succeeds Mr. Dotson at Sanborn.

E. W. Schneider, grain buyer for the Crescent Milling Co. at Fairfax, Minn., for the past three years, has severed his connection with that company and taken a position in Minneapolis.

Frank Schneider of the grain firm of N. & F. Schneider was united in marriage with Miss Barbara Haas at St. Peters, Mo., on November 24. Mr. and Mrs. Schneider will reside in St. Peters.

The Updike Grain Co. of Omaha, which recently purchased the J. H. Hamilton Elevators at Mondamin and Modale, Iowa, has retained C. A. Willis and W. M. Sharpnack as agents at the two houses.

F. B. Blakeley, assistant treasurer of the Peavey Grain Co. of Minneapolis, was seriously injured in that city on November 20, when a street car struck the cab in which he was riding. Mrs. Blakeley was also injured.

Henry Maher, grain inspector for Abilene, Enterprise and Detroit, Kan., has resigned to take charge of the Santa Fe Elevator at Abilene for the Hoffman Milling Co. Mr. Maher is succeeded as grain inspector by Mr. Young of Kansas City.

E. A. Brown, of E. A. Brown & Co., the well-known grain firm of Minneapolis, and one of the leading citizens of Luverne, Minn., was recently united in marriage to Miss Mary Mitchell of Fulton, Ill. An eastern trip will be taken, after which Mr. and Mrs. Brown will reside in Luverne.

W. H. Acker, president of the Richmond Elevator Co. at Richmond, Mich., celebrated the thirtieth anniversary of the Richmond Bank, of which he is also president, on November 14. Over seven hundred persons called at the bank on that day and each was presented with a handsome and useful little souvenir of the occasion.

UNIFORMITY IN GRAIN INSPECTION.

While the Commercial West is heartily in sympathy with the movement begun by the Grain Dealers' National Association for uniform grades of grain, or uniform inspection, it does not believe, as some profess to do, that the adoption of uniform grades by the different markets and inspection departments will cure all the evils of which grain shippers and buyers complain. It bases this view on grain inspection in Minnesota. As the grain inspection department is a state institution, the grades or the description of grades, are, of course, the same in Duluth as they are in Minneapolis, but the grading is not, for it frequently occurs during every season that shippers to the West at points where the freight rate is approximately the same to each market will find it a decided advantage to ship either to one or the other, because of the better grading in one of the markets. This is not always so, but it sometimes happens that a shipper will get as much as 2 cents a bushel more for certain grades of grain in one market than he would in the other.

Now this discrepancy cannot, of course, be due to lack of uniformity in grades. It is entirely due to the inefficiency of inspectors or to lack of definiteness in the descriptions of the different grades of grain. If this can occur at times every season in Minnesota, it can and will occur in the various markets of the country under a system of uniform grades for the various markets. While it is important, of course, that all markets should have the same grades, it is just as desirable that there should be some reform in the methods of inspecting—an inspection of the deputy inspectors or a training of them and not so much looseness in the phraseology describing the various grades, so that an inspector cannot have so much leeway, so much opportunity for error of judgment. Furthermore, it is equally as desirable that politics be eliminated from the inspection department as it is to have uniform grades.—Commercial West.

CROP REPORTS

The Michigan December report places the wheat condition at 75 as against 83 a year ago, when crop turned out about 15,000,000 bushels.

The Iowa report estimates the corn yield of the state 301,873,000 bushels. The yield last year, according to government figures, was 270,220,000 bushels.

Wheat growers in Pennsylvania are complaining of the ravages of an insect pest. Some growers estimate a loss of one-third of their crop from this source.

The Commissioner of the Tennessee Bureau of Agriculture in his latest report on crop of his state places the acreage sown to wheat at 70 per cent, against 79 year ago, and the condition 68 against 77 year ago.

The Missouri December report puts the corn crop of that state at 182,000,000 bushels, with quality 81 against 86 last year. The wheat acreage seeded this fall is placed at 1,650,000, as against 1,928,000 a year ago.

The commissioner of agriculture of Tennessee, in his latest report on the crop of his state, places acreage sown to wheat at 70 per cent, where it was 79 per cent a year ago, and the condition 68 per cent, against 77 per cent last year.

The Department of Agriculture of Ontario has issued a bulletin showing the areas and yields of the principal field crops of the province for 1908. There were 16,430,476 bushels of fall wheat grown this year as compared with 15,545,491 bushels last year.

The crops of Manitoba, Saskatchewan and Alberta are estimated by the Northwestern Grain Growers' Association at 99,311,840 bushels of wheat, 90,202,200 bushels of oats and 20,877,000 bushels of barley. The amount held by farmers for export is placed at 38,000,000 bushels.

The Alberta Department of Agriculture estimates the total crop yield of that province at over 19,000,000 bushels, the major part of which is oats. Sprig wheat is placed at 2,844,588 bushels and winter wheat at 2,397,588 bushels. The yields were not up to the prospects of early summer.

B. W. Snow in his December report puts winter wheat condition 78.9, as against 91.9 a year ago, with conditions poor everywhere except on the Pacific Coast. The acreage is placed at 27,600,000, on which the indicated yield is 372,000,000 bushels, compared with 426,000,000 bushels harvested this year.

The newly seeded area of rye is estimated as being 4 per cent less than the area sown in the fall of 1907, equivalent to a decrease of 80,000 acres, and indicating a total of 1,935,000 acres. The condition of rye on December 1 was 87.6, as compared with 91.4 on December 1, 1907, 96.2 on December 1, 1906, and a ten-year average of 95.0.

The winter wheat situation in Ohio, Indiana and Illinois is particularly acute, on account of the drouth of this fall. While the crop has grown fairly well, the lack of moisture has been very great in some localities, rendering the plants less thrifty and unable to stand the freezing weather. What effects the recent cold will have upon the crop cannot now be determined.

The Government Crop Report of December 7 estimates the newly seeded area of winter wheat as being 5.6 per cent less than the revised estimated area sown in the fall of 1907, equivalent to a decrease of 1,762,000 acres, and indicating a total of 29,884,000 acres. The condition of winter wheat on December 1 was 85.3, as compared with 91.1 on December 1, 1907, 94.1 on December 1, 1906, and a ten-year average of 92.2.

George Phillips, in his summary of over 2,000 answers from the seven surplus in reply to questions about corn, says in part: "Basing my report on the government estimates of yield for these seven states and using the six last years—all big crops—to find an average, these same states have raised but 1,238,000,000 bushels this year. On basis of the government report for last year's yield for these same states I find that they raised 74,000,000 bushels less than last year."

Broomhall's foreign crop summary for December 9 reads: "United Kingdom and France—There has been no change since our last report and the general outlook for the new crop continues favorable. Roumania, Spain, Italy, North Africa—The outlook for the crop continues favorable. Germany—The weather continues favorable, being mild and wet, and seeding is still in progress, but it is expected that the acreage will still show a decrease as compared with last year. Exports of native wheat are reviving, and supplies are only fair. Austria-Hungary—The weather is favorable and further seeding has been accomplished.

Russia—The weather in the south continues mild, which is unfavorable for the new crop. There are no complaints received, however, except from the extreme southeast, where drought is reported. Argentina—The weather continues favorable. Australia—Harvesting is in progress under favorable weather conditions. India—Both the weather and the crop outlook continue satisfactory."

The report of December 9 of the Kansas Department of Agriculture puts the total value of that state's farm products for this year at \$475,244,831, or \$11,596,224 in excess of last year, which was the best up to that time. The winter and spring wheat crop aggregated 76,808,922 bushels, exceeding last year's yield by 2,653,227, though on a reduced acreage. Of this crop 400,362 bushels were spring wheat, the rest winter wheat. The spring wheat acreage largely decreased and the crop was practically a failure. The total corn yield is placed at 150,640,516 bushels, which, at the prevalent high farm prices for corn, was worth \$82,642,461. The hay yield was very good and 878,283 acres of alfalfa were harvested.

The official report of the Ohio Department of Agriculture, issued December 1, estimates the total corn crop of that state for 1908 at 103,629,746 bushels, an approximate increase over 1907 of 1,300,000 bushels. In regard to wheat we quote from the report as follows: "Wheat shows a slight improvement since the issuance of the last report, its condition being now estimated at 60 per cent, compared with an average, as against 56 per cent, reported one month ago. Local showers in many sections of the state have proven very beneficial, hence the increase in condition reported. The plant generally is small and weak, in poor condition to go into winter, and unless conditions are most favorable during the winter and early spring months, many fields will be abandoned and put to other crops. The seeding was unusually late, due to the prolonged drouth, which also tended to greatly reduce the area seeded."

THE HARVEST YEAR.

"Bradstreet's" has prepared the following summary of the yields of leading crops this year, many figures, it is explained, being estimates and subject to final revision:

	Yields, 1908.	Change from 1907.	Past Record	Yields, Year.	Year.
Corn, bu.....	2,642,687,000	+1.9	2,927,416,091	1906	
Winter wheat.....	425,940,000	+4.0	492,888,004	1906	
Spring wheat.....	233,090,000	+4.0	293,155,322	1899	
Total wheat, bu.	659,030,000	+3.9	748,460,218	1901	
Oats, bu.....	789,161,000	+4.6	987,842,712	1902	
Barley, bu.....	167,242,000	+9.1	178,916,484	1906	
Rye, bu.....	30,921,000	-2.2	33,630,592	1902	
Buckwheat, bu..	15,648,000	+9.0	22,791,839	1866	
*Total, bu.....	4,304,689,000	+2.9	.....	....
Flaxseed, bu....	25,717,000	-5	29,254,880	1902	
Potatoes, bu....	274,060,000	-7.8	332,830,300	1904	
Hay, tons.....	67,743,000	+6.2	66,829,612	1889	
Tobacco, lbs....	629,624,000	-9.9	\$21,823,962	1902	
Rice, bu.....	22,718,000	+2.1	21,096,038	1904	
*Sugar, tons....	1,600,000	+2.1	1,565,000	1907	
Cotton, bales....	13,000,000	+12.3	13,600,000	1904	

*Six leading cereals. †Beet and cane (including Philippines).

Most of the country's crops, it will be seen, show gains this year over last, cotton and hay leading in importance of output. Of the cereals, all but rye gain, though the increases are slight and the yields in no case are equal to the record yields of the past. The aggregate yield of six leading cereals is 2.9 per cent over 1907. Hay, rice and sugar promise record outputs, but the potato crop is a short one.

As regards prices, the producer seems, except in the case of the great Southern staple—cotton—to be greatly favored. Cereal producers have had no large stocks. Indeed, the world began the new cereal year with empty bins and high prices have ruled. The three leading cereals—corn, wheat and oats—have been and are selling at higher prices than last year—practically since harvest began. Cotton has sold below a year ago, the falling off in price ranging from 4 cents at the beginning of the season to 1 1/4 cents now.

C. O. Nicholson has resumed the management of the Hubbard & Palmer Elevator at Lewisville, Minn.

A member of the Canadian milling firm of Ogilvie & Co., in making an address at Port Arthur a few days ago said: "It may not be generally known that the company with which I have the honor to be connected were the shippers and owners of the first wheat that was ever taken from western to eastern Canada. This was so short a time ago as 1878. A shipment of 800 bushels was loaded on a Red River steamer and taken up the Red River to Fisher's Landing, then the terminus of northwest railway development in the United States. It was here transshipped and taken by car to Duluth, where it was carried by one of the small boats then sufficient to meet the requirements of lake shipping to the East."

TRADE

THE FUTURE OF CORN IN AMERICA.*

BY PROF. B. DAVENPORT,

Dean of the College of Agriculture, Urbana, Ill.

We have hardly yet commenced to realize the abundant uses to which this crop may be put. It was burned by the pioneers for fuel, a custom that happily is left behind. Its use as silage is now well under way and is certain to greatly increase. All considerations point to the belief that not only in dairying but also in beef production, the use of silage will be found indispensable.

Looking from the present to the future:

Aside from purely agricultural uses demand for corn for manufacturing purposes is bound to increase. As a source of starch, sugar and alcohol, this crop is almost if not quite the rival of the potato; and while the use of fermented liquors for drinking purposes will hopefully and almost certainly decrease, the mechanical needs for alcohol both natural and denatured are certainly bound to greatly increase. Every time we lick a postage stamp we pay an unconscious tribute to corn, for the gum that causes the adhesion is now one of our corn products.

Within the month, a representative of one of the largest eastern paper mills was in my office discussing the use of cornstalks for paper pulp. I was astounded to learn from him that all the material required by a mill of the largest capacity could be produced by Indian corn within a radius of ten miles from the mills. With our decreasing timber supply, we are nearing the end of our era of destruction, and some substitute must be found. What is better than corn? It takes a long time to get a tree started. All growth is in proportion to leaf surface. When the tree is small, the leaf surface is slight, but it increases rapidly with the increased size and age of the tree. Everybody has noticed this without thinking much about the reason for it. He has noted how long it takes the little tree to "get started" and he has noted, too, how rapidly it grew after it had reached the diameter of four to six inches, by which time it supported a leaf surface several hundred times as great as when it was a seedling.

MUST NOT DESTROY TREES.

To destroy our young timber trees, therefore, and grind them into pulp, just as they have reached the age of profitable and rapid growth, and after they have overcome the struggles of the beginning, is economically wrong. The supply ought to be replaced by some annual crop that can reach its full maturity within a single season. Such a crop is corn, and I doubt if it is too much to say that in the very near future, the pulp mills will be supplied very largely from this source. A canal from the lakes to the Gulf means slack water navigation. But slack water navigation means dams and dams mean power. So that in the not distant future we may expect and confidently hope to see the rivers that lead out from the great corn belt supplying both the water and the power for our great pulp mill industry, whose material will be supplied by corn.

It is not too much to predict a population of 500,000,000 in this country by the end of the present century. This enormous increase in population would result with less than half the rapidity of increase of the last century. There are men now living who will see our population reach at least half this figure. When even that time comes the Mississippi Valley will of necessity become the grainery of the United States, and corn will need to do its utmost toward producing the food supply of our tremendous population.

Our present animal census shows that we have approximately 216,000,000 animals, or two and one-half for each inhabitant. If our future increased population shall undertake to provide itself with animals as well as we are provided, the draft upon the food supply will be enormous.

Just where this food supply is coming from is not clear to see. We are talking about conditions when our population shall be four or five times what it is to-day. The acreage of the country, so far as profitable production is concerned, has nearly reached its limit, so that the burden of the increase will be thrown back upon our better lands to meet. All of which means that the Mississippi Valley will be taxed to the utmost, and even corn will have all it can do.

SCIENTIFIC FARMING BEST.

On the university campus is a little spot of ground which has grown corn continuously for thirty years, with no relief, either by fertilizer or change of crop. The yield has decreased on the average about a bushel a year. Within a stone's throw is another piece of ground which has been farmed by the best-known methods re-

*From a lecture by the author, delivered at the Illinois Corn Exposition at Springfield, Ill., on Tuesday, November 24, 1908.

gardless of expense and which is producing as high as 118 bushels. This yield, under present conditions, does not pay so well as the yield on another field nearby, which is secured at less expense. On this field methods are employed which are economically profitable. Indeed, they are the most profitable of all the various combinations of fertilizer and labor which have been tried on this land. The yield here is approximately ninety bushels of grain per acre, which may be said, under present conditions, to be the most profitable yield of corn.

This is not saying that this yield would be the most profitable if every corn raiser could at once produce it. But as our population increases, the conditions become more favorable for this yield on all the farms.

Now there is a strange relation between the average yields under ordinary farm conditions in America and what has been secured elsewhere. Our wheat yield is about twelve bushels per acre. That of England about thirty, or two and one-half times as much. The remarkable coincidence is that this yield of eighty-six bushels of corn is almost exactly two and one-half times the average yield of corn, thirty-six bushels. All of this indicates, or seems to indicate, that, under the impulse of increased population and increased needs, we can raise our grain yield to about two and one-half times their present magnitude, but to go much above this point is an accomplishment to be achieved with great difficulty.

One hundred and eighteen to one hundred and twenty bushels per acre seems to be about the climatic limit for corn. This is only a little over three times the present average yield. It is perfectly clear, therefore, that the increase of population is certain to overtake the food supply, and that, too, some time within the present century, unless some social or economic situation intervenes to check the increased population.

CORN IS NECESSARY.

The first effect of scarcity of food will, of course, be felt with the submerged masses in the great cities. Indeed, that has already commenced, a fact brought home to us now by the thousands of children who go to school each day without a breakfast. Wholly aside from this, however, is another fact of large consideration and it is one which the public realizes even more than the farmer, pathetic though it is, and that is its effect upon animal life and the meat supply of our table. Roughly speaking, it requires about ten pounds of grain or its equivalent to make a pound of meat. Moreover, the pound of meat is no more nourishing than any one of the ten pounds of grain that went to make it. In other words, animal food in times of plenty can be said to be about ten times as expensive as vegetable food. In times of scarcity, when all the food is needed by the people, animal food becomes impossible.

Our descendants must some time face the day when they must surrender something in variety of food and lose something in the service of animals that we and our immediate descendants can afford to enjoy. Of all the agencies that will be able to stave off this evil day, Indian corn is the most promising. With its natural companion, alfalfa, we can sustain our fertility comfortably.

When the time comes that we can no longer support a large animal population, we shall be in distress for another reason. A large nitrogen supply is imperative. The most desirable means of securing it is through our leguminous forage crops. These are alfalfa, soy beans, cow peas and the various clovers. These are all forage crops, readily eaten by animals, but unsuited to human food. If the time comes that we must reduce our animal population on account of scarcity of food, we shall be obliged to readjust our entire farming operations, and introduce in place of the leguminous forage crops other legumes which we ourselves can consume. This would reduce us to peas and beans unless we should introduce the lentils, for which Jacob sold his birthright.

INDIAN CORN BEST.

From any point of view, therefore, Indian corn is not only a great crop in the present day, but it is designed to play a greater role in the future than in the present or the past. It will prove to be our piece de resistance against the coming days of pressure for food. When those days come, there will be a world competition for sovereignty and power. Those will be the days that will try the American race of what stock it is made and how it feeds itself. It is perfectly well known why England desired to control India. It was a question of wheat. It is perfectly well known, too, that England cannot engage in war except in such a way as to insure a food supply from friendly powers.

America is a country of tremendous expense, but there is no portion of its territory that will figure so largely in coming days as the corn-

producing region of the Mississippi Valley. These are the lands and this is the crop upon which, more than any other single factor, will depend the strength of the American people. And Illinois does well to honor corn, to study corn, and learn how to produce it even more successfully in the future than in the past.

Cotton is not king in this country. The kingship of crops belongs to some great food plant and for Anglo-Saxon conditions it is either wheat or corn. On the score of quality for purposes of human food, we can yield the palm to wheat, but on the score of quantity, and that which will insure power to the people before the hard days come, we must all admit that corn is king.

A NEW GRAIN PROBLEM.

In reference to the discussion regarding the difference between wheat prices in Manitoba and those in the neighboring states, the Montreal Witness has the following to say:

"Grain merchants on 'change here are much interested in the statement from Winnipeg to the effect that the farmers throughout the prairie provinces are angered over the fact that the price of wheat is from 6 to 7 cents higher just across the line than they can secure for their grain. Those adjacent to the border are hauling their grain to the United States elevators when the distance is not too great and send it East in bond to eastern Canada. Freight rates to Duluth and Fort William are similar. The grain men say they cannot understand, but the farmers attribute the difference to the grain men's combine."

"The present conditions in which grain is marketed in western provinces pay to the farmer every cent that the market will afford for his wheat. The daily market prices in Winnipeg are the only guide which the purchaser from the farmer has on which to fix a price, and it is well known that the competition in the Winnipeg market is not only between the local dealers, but that the market is in touch with the leading United States markets, such as Chicago, Minneapolis and New York, including the markets in the United Kingdom as well, such as London and Liverpool. It is a fact that the margins between the Winnipeg daily prices and the London and Liverpool prices are so close that there is practically no margin whatever for the handling of their wheat. It is only in the fluctuations of the price that the merchant can look for any profit."

"It is natural to expect that the United States railways, with branches reaching to the boundary between Canada and the United States, will use every means possible to induce the farmers in Canada to draw wheat across the line to be delivered to the bonded elevators that are provided in order to get this business. The prices that are being paid at these bonded elevators should not exceed the prices that are being paid to the farmers delivering wheat at the elevators along the Canadian Pacific and other Canadian railways. This wheat, delivered to these bonded elevators, must be manipulated in some manner, otherwise they could not ship the wheat and sell it to the Liverpool and London markets in competition with the shipments from Fort William. Any irregularities with the United States are beyond the control of the authorities in Canada."

MONTRÉAL ELEVATOR SYSTEM.

The grain shippers of the port of Montreal can no longer complain of the lack of grain conveyors connected with the Harbor Elevator, which is now in the position of serving ten berths simultaneously, says the Trade Bulletin. The sheds served are No. 2, the shore wharf of the Alexandra Pier; No. 3, berths 4, 5 and 6 of the Alexandra Pier; berths 7, 8, 9 and 10 of the King Edward Pier; Berth No. 11, shore wharf, between King Edward and Jacques Cartier Pier. These include the allotments of the Allan line, the Dominion line, the C. P. R. line and the Robert Reford Company. Besides the above, the Montreal Warehousing Company's Elevator has two conveyors, which have been busy all season serving two vessels at one and the same time, and since the opening of navigation have elevated direct over the carriers into vessels no less than 8,369,525 bushels, besides which they have floated into steamers in the harbor 3,700,000 bushels, making a total of 12,069,525 bushels. This, in connection with the completion of the conveyors of the Harbor Elevator, constitutes, it is said, the greatest grain conveyor system in the world. Besides the above, it is estimated that the Harbor Elevator has floated into vessels about 6,000,000 bushels and the Montreal Grain Elevating Company about 6,000,000 bushels.

TRANSPORTATION

Wheat shipments in the Pacific Northwest are congested by scarcity of cars.

The Northern Pacific has opened an extension from Culdesac to Grangeville, Idaho, opening up a wheat district producing in 1908 about 6,000,000 bushels.

A tow, consisting of twenty-five loaded grain boats, left the foot of Twenty-third Street, Troy, N. Y., for New York. The fleet was handled by one tug.

The Canadian railroads have been taxed to the utmost to forward grain to Winnipeg and head of the lakes and by December 1 a serious blockade had been created.

Navigation on the lakes has closed for the season, rates at the close being at the top for the season. A number of big vessels were chartered at Duluth for winter storage at Buffalo at 4 cents and some business was done at 3 cents to 4 cents on wheat for unloading.

Farmers of Walla Walla County, Washington, have decided to take over all stock and right-of-way of the Columbia & Walla Walla Traction Co. and go ahead with the construction of the road and complete it in time to haul wheat to the Columbia River next fall.

The first of a series of grain rate hearings taken up by the Oregon State Railroad Commission on its own motion was held in Pendleton in November, the purposes of the hearings being to determine whether the grain rates from eastern Oregon points to Portland are equitable.

The Canadian canals closed for the season on December 3. The season's business was moderately satisfactory. Wheat shipments were exceedingly good, bettering those of last year by about 5,000,000 bushels; other cereals showed a slump, however. Oats, corn, barley and rye all showed decreases.

The matter of the grain door has again been taken up by the Omaha division of the Central Association of Railroad Officials. It has been suggested that the railroads combine and agree on one man with whom they will contract to furnish the doors for a stipulated amount. This will do away with each road's looking after the door business for itself.

The stoppage of the elevator allowances payments has been postponed until July 1, 1909, by which time the legality of the Commerce Commission's position can be passed upon by the courts on the application for an injunction to be filed by the Board of Trade of Kansas City, Omaha and other Missouri River cities. The latter claimed that it was unjust to require them to lose the allowances until the courts had been given an opportunity to consider the matter.

Important changes in the rates on grain from more than twenty of the largest shipping points on the Chicago, Milwaukee & St. Paul road in Iowa and South Dakota, by which the rates to Omaha are increased and Sioux City is placed upon a parity with that point, are announced. The rates from these towns to Omaha, which were 8 and 9 cents, are now 11 and 12 cents, the increase averaging about 2½ cents per 100 pounds. The rates to Sioux City from these points remain the same. The rates have caused serious disturbance in Iowa and a protest may be filed by Iowa dealers.

Grain shippers from Memphis, Cairo, East St. Louis, Evansville, Cincinnati and Louisville met at the last-named city on December 1 to frame a protest against the recent ruling of the Commerce Commission on milling-in-transit rates. Until the Commission ruled against the practice it had been the practice to substitute other commodities than the original shipment (under the milling-in-transit privilege) and the Commerce Commission rules that such substitution is not lawful. The grain shippers want things left in their present status on the ground that if they have to keep track of the original shipment and see to it that it reaches its original destination, they will be put to an unprofitable expense.

New grain rates, equivalent to a reduction of 20 per cent of the old rate per ton, went into effect on December 1 on the West Shore, Erie, Buffalo, Rochester & Pittsburg, New York Central, Lehigh Valley, Lackawanna and Pennsylvania Railroads. By order of the New York Public Service Commission the New York Central and the West Shore Railroads have reduced to 25 cents per car the charge for weighing on individual track scales of consignee, or shipper, for account of owner of such scales, or any other person or firm or person who may use such scales as a part of their loading or delivering track, for a car weighed while in course of movement to or from the place of loading or unloading, when no

extra switching from one track to another is involved. The old charge for such services was 50 cents per car.

The Erie Canal closed for the season on November 30. The total business on the canal fell below that of 1907, due to the increase of rates forced by the Erie Boatmen's Union.

The Texas & Pacific Railroad Co. was indicted by the federal grand jury at New Orleans on November counts for the alleged violations of the interstate commerce act, with particular reference to the imposition of certain car service charges imposed on grain dealers in New Orleans. The violations are said to have occurred between December 24, 1907, and February 16, 1908. It is averred in the indictment that the railroad, with the wilful intention of getting more freight charges than its published schedule provided for, illegally imposed car service charges for several days in each instance, when it knew that the shipments were still in transit in the parish of Jefferson and could not be delivered to the consignee in New Orleans.

MILLING-IN-TRANSIT.

Commerce Commissioner Clark in ruling on certain phases of the milling-in-transit privilege under the present commerce act informs the Q. & C. the present commerce act informs the Q. & C. traffic officials that—

"A carrier may ship grain from several different points of origin to a transit point where it may all go in the same bin, and it may forward out of that bin the same kind of grain under its transit rate, provided it forwards on the rate from a given point of origin no greater amount of the same kind of grain or its product than is shipped in from that point, and provided also that the grain that was shipped in from that point has been locally consumed or otherwise disposed of.

"We do not think it is permissible or lawful to forward on the remainder of a transit rate grain or other commodity that did not come into that point under the transit rate. For example, we think it unlawful for a carrier to grant a transit privilege at a certain point where there are both rail and water transportation and to permit grain that comes in under its transit privilege to be consumed locally, and grain that comes by water or other transportation lines to be substituted for it and forwarded from that point on the remainder of the transit rate.

"We realize that this probably involves some changes and the necessity of separating, more than has been done in the past, the commodities that are entitled to transit rate and those which are not, but it is so plainly within the terms of the law and so clearly necessary in order to avoid wide opportunity for discrimination and for evasion of tariff rates that the necessity for such conclusion is obvious.

"I have referred especially to grain, but, of course, the principle of law that applies to transportation of and transit on grain applies with equal force to transportation of and transit on other commodities.

"It has been urged in correspondence on this subject that it may be proper for the Commission to say that it is unlawful to substitute tonnage at the transit point in the handling of salt, but that as commercially all commodities cannot be handled on exactly the same basis a different rule should apply to grain.

"It is also stated that carriers have established the transit privileges generally at the request of shippers, and that if the Commission is to make any ruling on the subject the shippers should be given opportunity to present their side of the case. Manifestly, if it is unlawful to make such substitution of tonnage at the transit point as to one commodity, it is equally unlawful as to another commodity; and if it is an unlawful practice, the question of whether it was established at the request of shippers or by the carriers at their own instance cannot be controlling or even important. It is not a question of difference of opinion as to what is a better way of commercially handling the commodities, it is a question of what the carrier and the shipper, both of whom are amenable to the terms of the law, may properly do within the limits of that law.

"The Commission has, in the two formal cases referred to, expressed its definite view of the illegality of such substitution of tonnage at the transit point, and its administrative ruling contained in Supplement No. 15A is a concrete expression of the Commission's view of the law as it is laid down. It is believed that the tonnage that is lawfully entitled to the transit rate can easily be kept separate from that which is not.

"A carrier names both domestic and export rates on grain to export port, the export rate being the lower of the two. Clearly the obligation is by law imposed upon that carrier to know that the grain upon which it grants the export rate is actually exported."

RAILROADS AND THE COMMERCE COMMISSION.

The Chicago Daily News on December 1 published an interview with, or, rather, a statement of, one of the Interstate Commerce Commissioners upon the attitude of the railway managers to the Commission, that rather punctures the armor of the complaining magnates who have been industriously circulating the impression that the Hepburn act is ruining the carriers:

"Every order of the slightest consequence which the Commission has made in the last year reducing a rate," said a commissioner, "has been resisted by the railroads. They have brought suits to set aside our orders. Such suits were brought in the old 'cotton-raisers case,' where we finally permitted three advances in the live stock rates; they were brought in the case of the lumber rates for the Pacific coast cases, where we permitted an advance of 10 per cent in a large part of their rates and declined to permit an advance of 20 per cent. Our orders were resisted in the case affecting through traffic rates between the Missouri and Mississippi rivers, which were probably the highest and most extortionate rates in all the United States. All the indications point to vigorous and concerted attempts on the part of all the roads to advance freight rates as soon as the conditions will permit it.

ATTITUDE OF THE ROADS UNFAIR.

"For years and years the railroads have earned more money than would be a fair return on their property, and the minute hard times came they complained that their property was confiscated by federal supervision of rates. The attitude of the roads is entirely unfair. They do not want to judge of the reasonableness of a rate by taking into consideration adverse and prosperous conditions; they want to pick out the worst time they can find when wages are highest and business at the lowest ebb and make that a standard by which to measure the reasonableness of their rate.

"As I have said before, the roads have allowed their equipment to run down in an attempt to keep up their net earnings. Their gross earnings have fallen off with the slump in industrial circles. Almost all of the roads have been trying to rebuild themselves out of their net earnings and they have incurred considerable liabilities on this account. When the traffic falls off they do not care to let their net earnings drop and necessarily allow their property to depreciate.

EFFECT OF COMMERCE LAW.

"The general effect of the act to regulate commerce has been enormously to increase the earnings of the roads. It has compelled the railroads to exact tariff rates. It has prevented them from making all sorts of concessions which they formerly made to shippers in the way of private rates and allowance of terminal facilities—things which they ought not to have done, but which they did in order to retain the patronage of a good shipper. They do not do this now. The amount paid out in rebates was something enormous. The Lake Shore people testified before us that it was 5 per cent of their gross receipts.

"The Commission has in a few cases ordered a reduction in rates. I do not think it has ever ordered a reduction of any considerable amount unless the reduction was made to offset an advance. That is to say a road would advance a rate, and complaint being made the Commission would order the rate put back or would put it one-half back. The act to regulate commerce has increased the net earnings of the roads. Legislation of other kinds decreased the revenues. There have been a great many laws which have increased the cost of operation, like the safety-appliance law, the sixteen-hour law, the nine-hour law and the act abolishing grade crossings.

FIGHT COMMISSION AT EVERY STEP.

"Possibly the action of the Commission may in the future put some check on the gross revenues for interstate movements, but it has not up to this time. In spite of the leniency of the Commission, the roads seem to have an idea that they must fight us at every step. In point of fact the new law works about like this: The roads make a dozen advances in rates. A complaint is made of one of them. We set that one advance back. We do not generally put it back to where it was before, but about one-half way. But even then the roads howl and declare that we are reducing their revenues. In eleven cases we have not touched the advance at all and in the twelfth case we have only half undone what they did, yet they denounce our action as arbitrary and ruinous. The roads will find out sooner or later that it is better for them to have a fair and intelligent tribunal to pass on these matters rather than a tribunal anxious to harass them."

The whole rate law is to stand or fall by the decision of the Supreme Court in a case now before it. It involves the famous question of court review, concerning which the Senate debated for weeks. The case is that of the Willamette Lumber Co., in which the roads question the reasonableness of the rate fixed by the Commission. If the court sustains the Commission the rate law will be regarded as having some teeth in it, but if the railroads win the Commissioners say the act might as well be wiped off the statute books and all idea abandoned of regulating the railroads until the Constitution is amended.

UNIFORM BILL OF LADING.*

The bill of lading is a receipt by a common carrier for goods which it takes for transportation. Primarily it was a simple document, and so long as it represented simply a transaction between the shipper and the carrier, and so long as transportation remained comparatively crude it remained a simple document.

As transportation facilities improved and grew in extent on the call of business; as that business grew to the point requiring the intervention of a third party (the banker), and the receipt for goods became a token of value upon which money extensions were given, and the receipt fell into the hands of foreign and sometimes unfriendly interests, it became necessary to read into that receipt certain conditions as a protection to the carrier.

Court procedure was from time to time called upon to settle disputed points and the decisions were made a part of the conditions of the receipt. As the lines of transportation were extended the hampering requirements of varying state laws were felt by the roads and conditions to meet these difficulties were incorporated, and thus by a gradual evolution the rather complex document of to-day, which is so little like a receipt as ordinarily understood as to require the telling for one to so consider it.

Naturally, on different roads different situations required meeting and solving, and while the bill of lading of all the lines were in the main, or rather in principle, the same, there was great lack of uniformity, causing confusion and oftentimes embarrassment to all parties to the transaction of transportation business.

From this situation grew a demand, more especially from the carriers and bankers, and to a lesser degree from the shippers, for an uniform bill of lading for the entire country, so that every interest having to do with any given movement might know exactly the terms and conditions upon which that movement should be handled. From this demand came in 1904 the uniform bill of lading of the roads within official classification territory, a bill which, if one may judge by its conditions, complexity, and its sweeping demands for freedom from all common law restrictions, must have been a combination of all the bills of lading in use, eliminating only the duplications of conditions.

Immediately upon its promulgation the shipping interests of the country organized combined resistance, and took the matter before the Interstate Commerce Commission, and at the hearing had the bill practically killed. Upon the request, however, from the transportation interests that they jointly (i. e., shippers and carriers) devise a bill, the case was not allowed to come to a decision, and was recalled from the Commission upon the carriers agreeing not to enforce the terms of the new bill.

A joint committee was appointed to draft this compromise bill of lading, and for two years they met periodically and struggled toward a settlement of the vexing questions. A half-dozen times broken up by the bitterness with which the fight was waged and as many times brought together again, they finally, during the summer of 1907, reconciled their differences and passed this compromise, or conference bill, to the Interstate Commerce Commission for review.

Before passing further to the history of this interesting document common justice demands that I say a word of appreciation of the Federation's representatives on this committee. Mr. B. A. Eckhart, of Chicago, one of our ex-presidents, regularly a member of the committee, and Mr. Herbert Bradley (deceased), our then traffic manager, who served as alternate in the stead of Mr. Andrew Toomey, of New York. Mr. Eckhart is an extremely busy man, has large and varied interests, and could ill afford the time necessary to give this question, either in the attendance upon meetings or in the preliminary very extensive study required, but with characteristic generosity he took up this question and fought the millers' fight as few in the trade could have fought it and fewer would. Mr. Bradley served as a representative of the New York Produce Exchange, but his affiliations and affections were almost entirely with the flour trade, and his efforts were entirely directed to the protection of that trade.

Due to the efforts of these two men our interest shows throughout the document, and while the bill they devised has been improved upon and cast aside it is to be hoped that their work may not be forgotten at least by this generation of millers.

This conference bill referred to the Interstate Commerce Commission was revised by them, and on October 15 and 16, 1907, a hearing was given by the Commission to all the interests affected. This hearing was attended by representatives of boards of trade, shippers' and receivers' associations, grain and steel

*A paper read by A. L. Goetzmann, secretary of the Millers' National Federation, before the Ohio State Millers' Association at Toledo, Ohio, November 13, 1908.

interests, bankers and railroads, and every interest expressed its criticisms and needs.

At this hearing a number of shipping interests, among them your Federation representative, recommended the so-called "clean" bill of lading, which in effect is a simple receipt for the goods which the carriers agree to transport subject to common and statute law. In a report to the Federation directors after that meeting your speaker said:

"It is inconceivable that we shall secure the clean bill of lading as proposed, but your secretary with others urged upon the Commission that in the formulation of the bill they use this clean bill of lading as a basis and build upon that what in their judgment they felt to be necessary," and that, in effect, is what has been done.

It may seem useless to so completely go into the history of the whole bill of lading question to talk to the bill now in use, effective since the 1st instant, but owing to the position which I take on the matter it is necessary to show how thoroughly the document has been passed through the fire to bring it to its present form, to avoid criticism at my acquiescence in certain conditions which, from some of you at heart, meets opposition.

I am in favor of this bill of lading. I have recommended that our members shall not oppose its introduction, and it is my best judgment that we heartily co-operate with the railroads and the Interstate Commerce Commission to its unopposed introduction and use.

It is not a perfect document from the standpoint of either shipper or carrier. It reflects in many of its conditions the compromise necessary to agreement on the conference bill. Without egotism I may say that I could devise a far more satisfactory bill for our use. On the other hand, he is a poor traffic official who could not devise a vastly better document for the carrier. But, striking a happy average, allowing for that give and take so necessary to nineteenth century business, it is all we have a right to expect.

Defects will develop as it is used; some of these are already apparent, but let us give it a fair trial; let us, if you please, "give it a show for its white alley," and after such trial let us, if necessary, go before the Commission—or, preferably, before the railroads—and ask our reasonable demands. We'll go into court with a good case, and before an open-minded judge, if we do so.

On this question of change the Interstate Commerce Commission said upon the promulgation of this bill with its approval:

"It should be distinctly understood that this approval does not imply acceptance by the Commission of any construction of the Carmack amendment at variance with its apparent purpose and intent, nor will the general recommendation now made preclude the Commission from passing independent judgment upon any provision in this bill of lading which may be drawn in question in future proceedings."

The bill is too long, and it is unnecessary here to take it up section by section. We shall, therefore, take up only the objections as they have been shown by the opposing organizations. These are:

1. The 10 per cent additional rate charge if the shipper elects not to ship under its terms.
2. The four months limiting period for filing claims.
3. The basis of value for claim payment, restricted as it is to invoice value.
4. The "natural shrinkage in grain" clause.
5. Liability of carrier as warehouseman only after 48 hours' notice of arrival is given consignee.
6. Cooperaage and baling at owners' cost clause.

Consider these seriatim, if you please:

(1) There are 46 states in the Union. Each one of them since its admission to statehood (if admission came since railroads have become so important a part of our business life) has endeavored to control the power so naturally flowing to the enormous aggregations of capital represented in our railroads. Most of these laws are the product of granger legislators, many of them radical to an absurdity, and many of them constructed as to defeat the very ends they sought. Consider with the carrier, if you please, the difficulties and expense of settling claims subject to these varying laws to an interstate railroad. On the other hand, consider the necessity resting with each of you under similar conditions of successfully carrying through the courts of a foreign state the collection of a claim for loss and damage. Again, consider the lack of definiteness of your banker in advancing on collateral subject to such vicissitudes, and I believe you will agree with me that the 10 per cent is not only not unreasonable but that you would rather pay the 10 per cent additional to ship subject to the uniform bill of lading than subject to only common and statute law.

The banker is entitled and wants to know the terms in which a loan is made and he naturally prefers a fair statement of such terms in advance.

(2) "Claims for loss, damage or delay must be made in writing to the carrier at the point of delivery or at the point of origin within four months after delivery of the property, or, in case of failure to make delivery, then within four months after a reasonable time for delivery has elapsed. Unless claims are so made the carrier shall not be liable."

The intelligent investigation of any claim depends, in a vast majority of cases, upon the memory of someone who has to do with the transaction. The railroad employee or official is a decidedly "fluid" commodity; there is constant change going on. For this reason it is important that as early investigation as possible be made.

The railroad claim agent on a trunk line passes hundreds of thousands of claims each year. It is to his interest and to the interest of his company to make as prompt investigation as possible. His tenure of office is dependent upon securing satisfying evidence of justice of claims before paying them. His company profits by prompt settlement of claims. You

profit by a similar promptness. Is it not a fair proposal that we shall do our part in this matter?

Again, no good business man allows his claims to run longer than necessary to a proper filing of same, and four months certainly is ample.

Again, consider what treatment a claim would receive in your office on a car of flour if presented even four months after its receipt by the consignee.

The original bill of lading allowed only 30 days for filing claims. The conference bill 60, and this allows 120. It seems reasonable.

(3) "The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property (being the bona-fide invoice price, if any, to the consignee, including the freight charges, if prepaid), at the place and time of shipment under this bill of lading, unless a lower value has been represented in writing by the shipper or has been agreed upon or is determined by the classification of the tariffs upon which the rate is based, in any of which events such lower value shall be the maxim amount to govern such computation, whether or not such loss or damage occurs from negligence."

This clause was the subject of long argument in the joint committee and before the Commission. It is my judgment it is fair. The only other basis of settlement is market value, and that is as liable to go down as to go up, and this would seem to strike a fair average, and is the most easily determined.

Again, from the miller's standpoint, since his product is—or should be—always shipped C. A. F. and not f. o. b destination, this is of but little interest, as legally the carrier is agent of consignee and not of shipper.

(4) "No carrier or party in possession of any of the property herein described shall be liable.... for differences in the weights of grain, seed or other commodities caused by natural shrinkage or discrepancies in elevator weights."

This is the great burden of complaint by the grain men, the justice of which I fail to see. Why should they be liable?

To be sure, it is wrong to say that the "natural shrinkage" shall be a fixed given per cent, which per cent is arrived at arbitrarily and without proper investigation or proof, but the bill of lading as it stands on this point, in my judgment, is above reproach. Our duty and the duty of the grain man in the premises is not to condemn the bill of lading, but to insist upon a proper determination of what constitutes a "natural shrinkage" in grains and seeds.

(5) "No carrier or party in possession.... shall be liable.... for loss, damage or delay caused by fire occurring after forty-eight hours (exclusive of legal holidays), after notice of the arrival of the property at destination or at port of export (if intended for export) has been duly sent or given; the carrier's liability shall be that of warehouseman only."

I believe this is wrong. If the demurrage is collected; if the carrier exacts pay for a service, he should accept the responsibilities pertaining to that service for which he is paid; furthermore, the law has repeatedly held—most recently in the Erie Railway Buffalo fire, in which much flour was lost—that he cannot evade such responsibility.

(6) "All property shall be subject to necessary cooperator and baling at owner's cost."

Literally and properly construed this is absolutely unobjectionable. I have read that this would mean paying for grain doors and for the expense of new packages and cost of labor reconditioning after wreck or other similar accident, all of which is utterly foreign to the text or to the intent of this clause.

It does mean, however, that you are to furnish a package suitable for the safe transportation of your flour, and in so saying the carrier is clearly within his rightful demands, and if there are some of us who would evade his responsibility in this respect he should be forced to pay for so doing.

It would seem that the objections to the bill are not founded on good reasonable grounds, looking at the matter from our standpoint, and I would urge now as at the beginning that you co-operate to the smooth introduction and use of this bill of lading.

In conclusion, let me draw your attention, please, to the Interstate Commerce Law, reading in part as follows, which may comfort you in case you are seriously desirous of using the law, even though you ship under this bill:

"That any common carrier, railroad or transportation company receiving property for transportation from a point in one state to a point in another state shall issue a receipt or bill of lading therefor, and shall be liable to the lawful holder thereof for any loss, damage or injury to such property caused by it or by any common carrier, railroad or transportation company to which such property may be delivered or over whose line or lines such property may pass, and no contract, receipt, rule or regulation shall exempt such common carrier, railroad or transportation company from the liability hereby imposed."

And a decision of the Federal Supreme Court reading:

"The carrier and his customer do not stand on the footing of equality. The latter is only one individual in a million. He cannot afford to giggle and stand out and seek redress in the courts. He prefers, rather, to accept any bill of lading, or sign any paper the carrier presents, often not knowing what one or the other contains," so I claim that a strict compliance by a shipper to the terms of an intricate bill of lading is not a sine qua non to his right of recovery.

South Dakota's coarse grain received this year is 75,584,000 bushels of corn, 32,281,000 bushels of oats and 24,414,000 bushels of barley. The wheat crop was 35,832,000 bushels.

A Successful New Year

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If you have not installed one of our machines, do not delay longer, but let us figure on your requirements.

The Ellis Drier conditions grain in a perfect manner and at minimum cost. That's the whole story.

Ellis Drier Co.

747 Postal Telegraph Building

Chicago

LATE PATENTS

Issued on November 10, 1908.

Grain Separator and Grader.—Frank G. Lyman, Wapakoneta, Ohio, assignor of one-half to John E. Gunther, Wapakoneta, Ohio. Filed October 30, 1907. No. 903,390. See cut.

Issued on November 17, 1908.

Grain Elevator.—James C. Tobias, Bucyrus, Ohio. Filed February 28, 1907. No. 904,378. See cut.

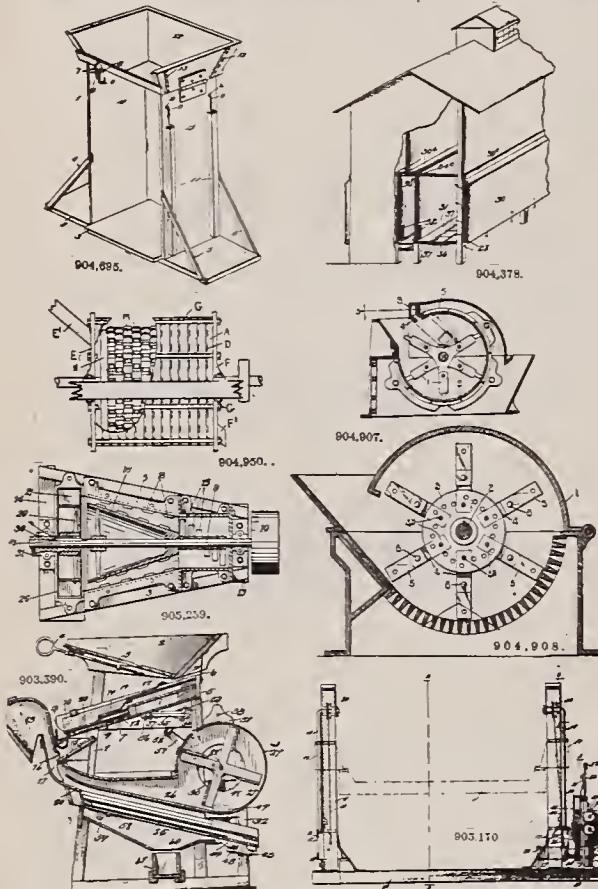
Issued on November 24, 1908.

Bag Holder.—Warren L. Herrick, Skyland, Cal. Filed December 9, 1907. No. 904,695. See cut.

Crusher and Pulverizer.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Filed April 1, 1907. No. 904,907. See cut.

Hammer or Beater for Crushers and Pulverizers.—Milton F. Williams, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Filed December 16, 1907. No. 904,908. See cut.

Crushers and Pulverizers.—Milton F. Williams,



St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Filed December 16, 1907. No. 904,909.

Grain Scourer.—Thomas Grose, Port Adelaide, South Australia, Australia. Filed September 10, 1907. No. 904,930. See cut.

Issued on December 1, 1908.

Wagon Dump and Elevator.—Frank Gahm, Streator, Ill. Filed January 27, 1908. No. 905,170. See cut.

Corn Sheller.—Charles J. Widmer, Sidney, Ohio, assignor to the Philip Smith Manufacturing Company, Sidney, Ohio. Filed September 19, 1907. No. 905,259. See cut.

BAGS UNSOLD.

The state of Washington's prison management are required to carry over about 1,000,000 unsold grain bags, being the largest unsold remainder ever on hand at the end of a harvest. It is said that the "Bag Trust" of the coast cut prices to such an extent that the state was unable to sell its product.

The price of grain bags dropped from 11 cents two years ago to about 7 cents early last spring and farmers took advantage of the low market and bought heavily. The farmers' unions of eastern Washington bought large lots and in this way the best of the demand was secured by the trust for its product. The crop proved lighter than expected and the late sales, which usually help to decrease the surplus stock, failed to materialize and the bags could not be used.

In spite of this condition of things the state is spending over \$100,000 to construct a new jute mill, the machinery being received at the prison. This machinery was ordered a year ago from Dundee, Scotland, and comes from the only factory in the world making the class of machinery

needed. Several hundred convicts have been engaged all summer in preparing the foundation for the mill, and everything is in readiness for the installation of the plant as fast as the looms arrive. The new mill will have double the capacity of the present mill, which is old and worn out. About 280 men have been employed in the mills in the past and it is expected that 600 will find work in the new one. Several hundred men have been idle most of the time, there being no employment at which they could be kept with safety.

J. G. Lounsbury has assumed charge of the Van Dusen Elevator at Silex, S. D.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE.

Elevators in Illinois and Indiana that handle from 150,000 bushels to 300,000 bushels annually. Good locations. Prices very reasonable. Address JAMES M. MAGUIRE, Campus, Ill.

LINE OF GRAIN ELEVATORS AND CLEANING HOUSE.

One of the best lines of grain elevators and cleaning house in Minnesota, on good line of railroad, at the low price of \$60,000. Owners wish to retire from the grain business. Splendid grain-buying points and also coal business in connection. Address

J. D. MILLER, Endicott Bldg., St. Paul, Minn.

FOR SALE.

Elevator for sale at Holder, Ill. Rebuilt in 1902; all new machinery; 12-horsepower Charter Engine. Capacity 28,000. Ground leased from L. E. & W. R. R. Co. Also an elevator at Fullerton, Ill., built in 1903. Ten-horsepower Charter Engine. Capacity 22,000 bushels; cribs for 5,000 bushels ear corn. Elevator is on owner's ground. Address

JOHN Y. CHISHOLM, Trustee, Bloomington, Ill.

MACHINERY

ENGINES FOR SALE.

Gasoline engines for sale; 5, 7, 10, 20, 30 and 45 horsepower.

TEMPLE PUMP CO., 15th Place, Chicago, Ill.

FOR SALE AT A BARGAIN

Several old-style No. 3 grain separators. New; never been used. Need the room and will close out cheap.

JOHNSON & FIELD MFG. CO., Racine, Wis.

FOR SALE.

One No. 37 Howes Oat Clipper, good as new. Address

THE ADY & CROWE MERCANTILE CO., Denver, Colo.

GASOLINE ENGINE BARGAINS.

One 6-horsepower Fairbanks, \$125.
One 4-horsepower Fairbanks, \$90.
One 2-horsepower Fairbanks, oil cooled, \$75.
One 2-horsepower Fairbanks, Jack of All Trades, \$60.

One 8-horsepower Howe, nearly new, \$150.

One 10-horsepower Waterloo, \$100.

One 10-horsepower Webster, \$100.

One 12-horsepower Webster, \$150.

One 12-horsepower Fields Engine, new, \$334.

One 15-horsepower Fields Engine, new, \$391.

ALLEN P. ELY & CO., Omaha, Neb.

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

FOR RENT.

We have for sale two new Triumph Corn Shellers, cheap for cash.

One complete outfit of machinery—rolls, belting, elevators, cleaners, etc.—for a 100-barrel flour mill. Must be sold at once, very cheap for cash.

One 50-horsepower gasoline engine, good as new, at less than half price. Address

GRAIN DEALERS' SUPPLY CO., 305 South Third St., Minneapolis, Minn.

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Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED.

Salesmen wanted to sell seed as a side line in all parts of the United States. Address SEED SALESMEN, Box 12, care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATORS WANTED

WANT TO BUY.

An elevator in north central Ohio. Address BOX 189, Sycamore, Ohio.

WANTED.

Elevator or mill and elevator for good improved Illinois or Iowa farm. Address IOWA, Box 1, care "American Elevator and Grain Trade," Chicago, Ill.

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Milling buckwheat wanted. Address H. H. EMMINGA, Golden, Ill.

FOR SALE.

Clover seed for sale. Name quantity and grade wanted. Address

H. H. EMMINGA, Golden, Ill.

JAPANESE BUCKWHEAT.

Recleaned Japanese buckwheat, dry and cool. Write for samples and prices.

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We are booked ahead on alfalfa meal. Let us send you sample and prices delivered. Address

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NATHAN & LEVY, Ft. Wayne, Ind.

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Write us for prices on bran, shorts, Kaffir corn, cane, millet, clover, alfalfa seed, alfalfa meal and red Texas oats. Can ship straight or mixed cars.

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O. MOHR, Mgr. G. C. HOLSTEIN, Sec'y-Treas

Mohr-Holstein Commission Co.

29 Chamber of Commerce

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References: Washington Nat. Bank. Duquesne Nat. Bank.

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6 Board of Trade CHICAGO

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IN CHICAGO AND COOK COUNTY

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MORSE RAREFIED
COLLECTOR FOR HANDLING
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NO CLOTH. NO MOVING PARTS

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Designers and Builders of GRAIN ELEVATORS in all parts of the world



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1811 Fisher Building

CHICAGO

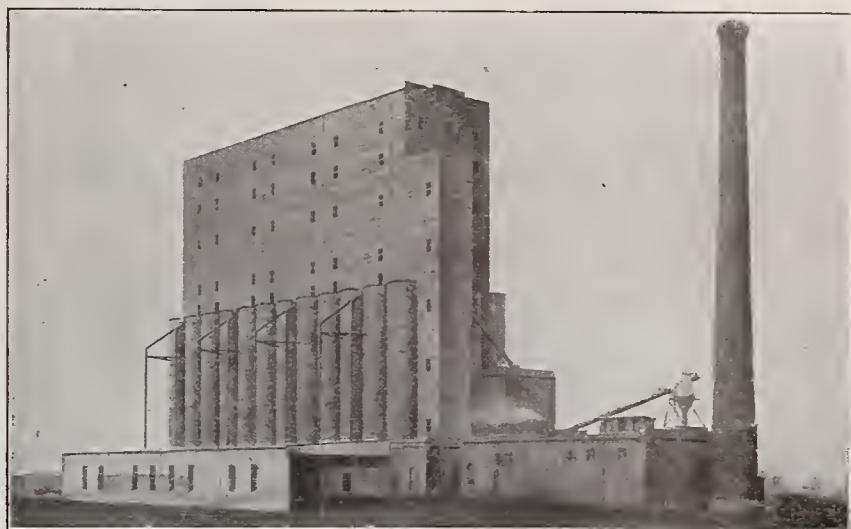
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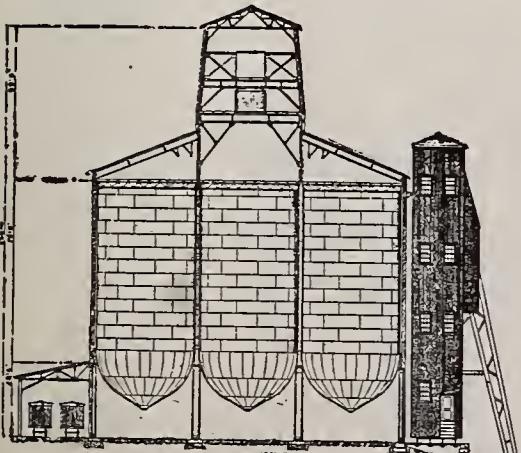


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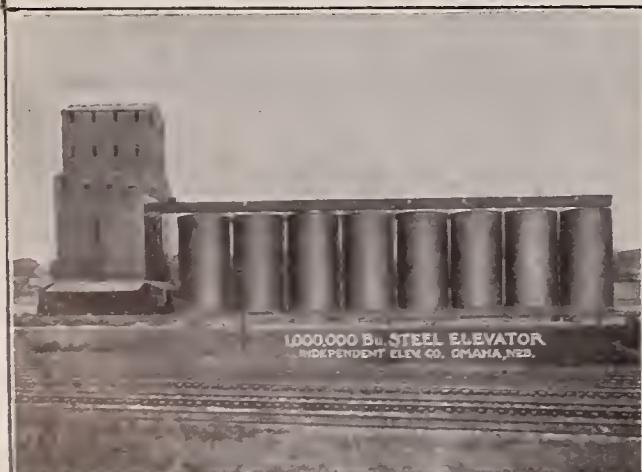
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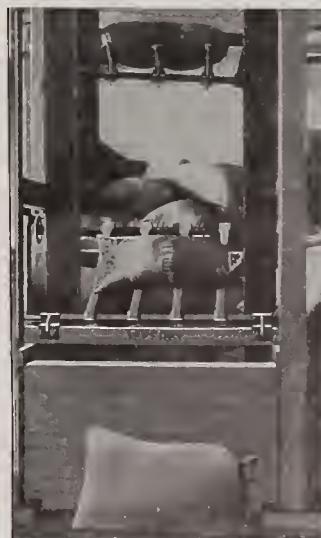
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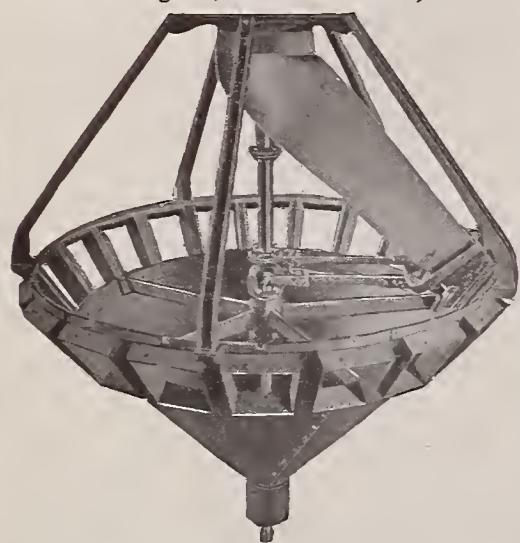
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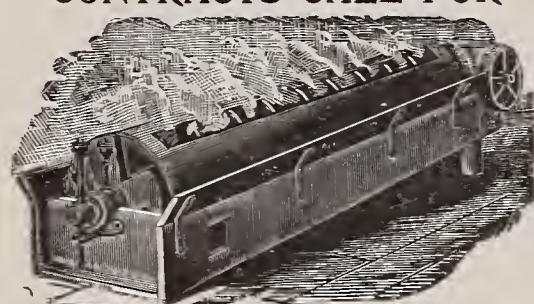
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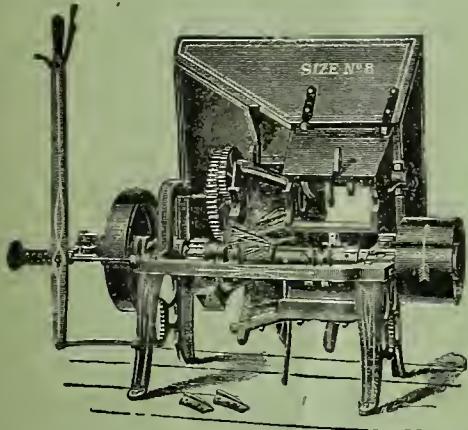
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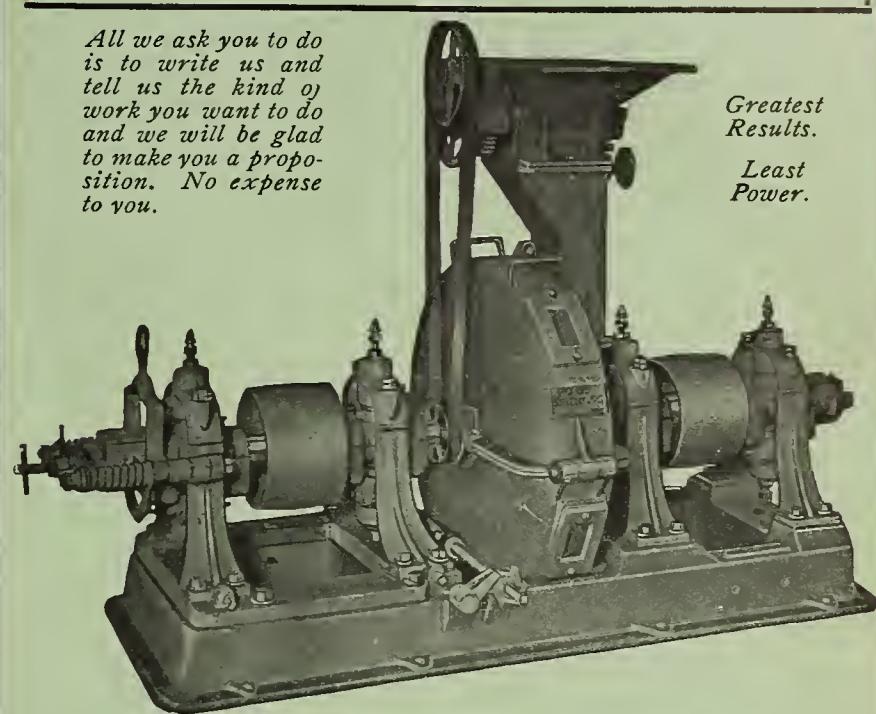
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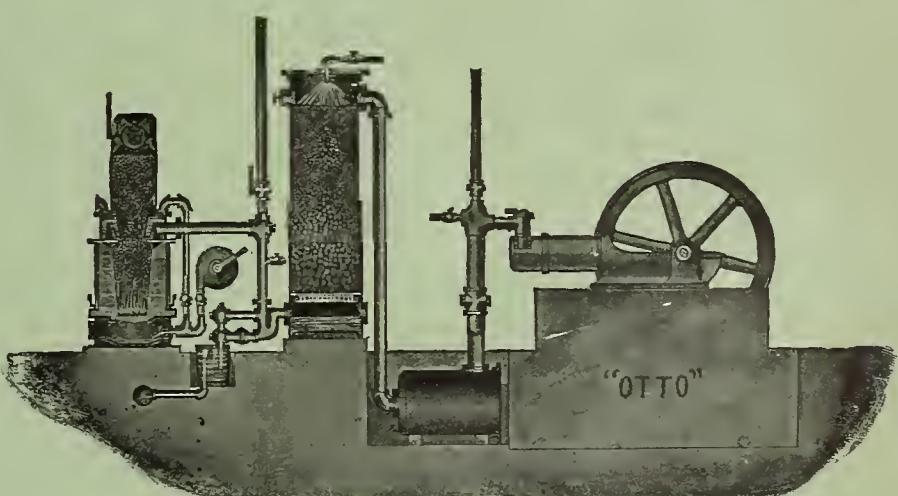
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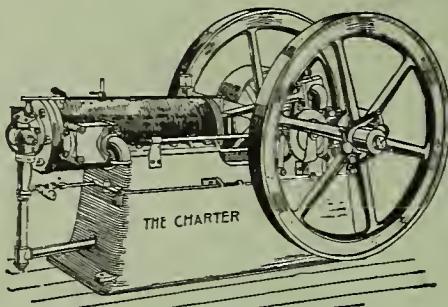
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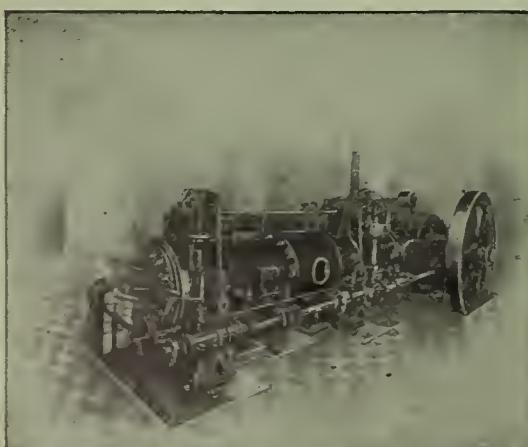
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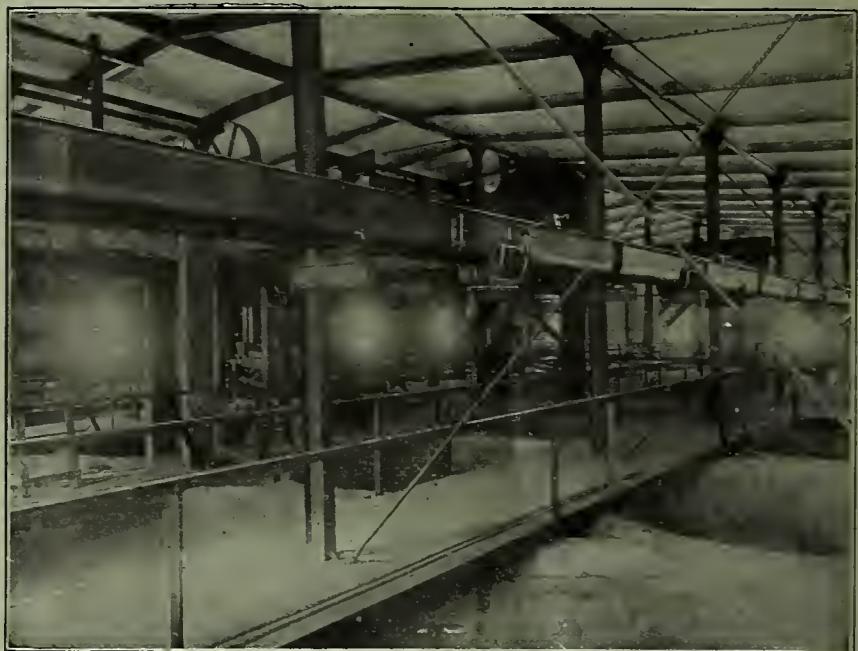
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